REPORT RESUMES

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OPERATION HEAD START--AN EVALUATION. FINAL REPORT.
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DESCRIPTIONS OF PHYSICAL FACILITIES, A VERBAL AND NON-VERBAL INTERACTION ANALYSIS MEASURED ON A (1) TASK-ORIENTING, (2) MAINTAINING SOCIAL ORDER, AND (3) FACILITATING SCALE, TEACHER INTERVIEWS, AND OBSERVER VERBAL REPORTS ASSESS A SELECTED SAMPLE OF CLASSROOMS WITHIN THE 1965 CAMBRIDGE SUMMER HEAD START PROGRAM. PERFORMANCE OF HEAD START AND NON-HEAD START PUPILS ENROLLED IN PUBLIC SCHOOL KINDERGARTENS THE FOLLOWING FALL IS COMPARED AND ANALYSED IN TERMS OF NORMS, EXPECTATIONS, AND LIMITS OF THE CLASSROOM, I.E. IN TERMS OF "THE CLASSROOM GAME." PUPIL BEHAVIOR IS CODED AS "WITH IT" OR "NOT WITH IT." OTHER COMPARATIVE PROCEDURES ARE TEACHER INTERVIEWS, TEACHER RATINGS OF CHILDREN, AND A READING READINESS TEST. INTERPRETATION OF THE DATA CHARACTERIZES THE SUMMER HEAD START PROGRAM AS LARGELY A SOCIAL LEARNING PERIOD WITH LITTLE ATTENTION TO COGNITIVE DEVELOPMENT. ACTIVITIES WERE JUDGED AS NOT CAREFULLY PLANNED, NOT DIFFERENTIATING NEEDS, AND NOT GOAL ORIENTED. A MAJORITY OF TEACHERS INDICATED THE PRIMARY ADVANTAGE OF THE PROGRAM TO BE IN TERMS OF HELPING CHILDREN MEET THE EXPECTATIONS AND DEMANDS OF THE FORMAL SCHOOL SYSTEM. NEITHER THE READINESS TEST NOR "GAME" ANALYSIS SHOW A SIGNIFICANT STATISTICAL DIFFERENCE BETWEEN GROUPS. TEACHERS PERCEIVED THE BEHAVIOR OF HEAD START AND NON-HEAD START CHILDREN TO BE ESSENTIALLY SIMILAR. THE INITIAL BEHAVIOR OF THE HEAD START CHILDREN TENDED TO BE MORE ACTIVE AND EXPLORATORY. (BH)

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LESLEY COLLEGE

Cambridge, Massachusetts

Final Report

OPERATION HEAD START: AN EVALUATION

Office of Economic Opportunity

Contract No. OEO-537

PS000088

OPERATION HEAD START: AN EVALUATION

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March 1, 1966

Final Report

Office of Economic Opportunity

Contract No. 537

Lesley College
Cambridge, Massachusetts

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The Head Start Program

During the summer period, 12 Head Start Centers were placed in operation under the auspices of the Cambridge Economic Opportunity Committee. Seven of these centers were located in facilities provided by social agencies and 5 were provided by the Cambridge School Committee. A total of 34 separate groups of children were offered a half day program under the immediate direction of 17 teachers and their assistants. A total of 484 children were in relatively full-time attendance at these centers in addition to those who were sporadic in attendance or did not remain for the duration of the program.

In attempting to provide a description of this massive intervention, it seemed most useful to focus on a selected sample of classrooms in a more intensive effort as opposed to a more general or scattered coverage of all classrooms. Since authorization for the study was received about midway in the summer program, severe time pressure was an important factor in determining this strategy. The procedure was implemented by selecting a sample of 8 teachers in consultation with Mr. Costa Leodas, Director of the Cambridge Head Start Program, to achieve maximum representation of such variables as: experience and training of ~~the teacher~~, public school and agency centers, space, equipment, and teaching style. During the last three weeks of the summer program, each of the classrooms was visited to collect the following types of data: 1) a 30-minute tape recording of the verbal interaction of the teacher and pupils during an instructional sequence; 2) diagrams of the location of children and adults in the classroom at 10-minute intervals during the taping period; 3) notation of equipment and facilities; 4) a copy of the teacher's plan book or log, and 5) an interview with each of the teachers.

The Classrooms and Program

The quality of a particular school program is partly dependent upon the quality of the verbal input of the teacher (Flanders, 1960; Hughes, 1959; Miller, 1964). It was not possible, after this contract was awarded, to obtain a sufficient sample of pupil-teacher interaction episodes necessary to draw valid conclusions with respect to this aspect of the summer Head Start program. However, the sample of tape recordings obtained permits a limited description of conditions in eight classrooms. In order to permit systematic analysis, the tape recordings were transcribed to make typewritten protocols.

The analysis of teachers' verbal interactions with pupils for a thirty-minute typescript of classroom teaching for each of eight teachers was accomplished by subjecting each protocol to a content analysis. The instrument used for the analysis of the protocols was the Collaboration Scale for the Analysis of Classroom Teaching Behavior (Appendix A) Use of the instrument on another occasion resulted in intercoder agreement for two independent codings ranging between .78 and .96. For the present study one experienced coder processed all eight records. No check of the reliability of the coding process was provided in this instance because the sample was so small and because the coder had established satisfactory reliability in earlier experiences.

Use of the Collaboration Scale permits a view of the teaching act within three general categories and seven secondary categories. The teaching tasks identified within this conceptual framework are:

- Working on Content or Task
  - Providing focus
  - Development of focus
  - Providing information
  - Appraising effort
- Maintaining Social Order
  - Setting expectations
  - Implementing action
  - Appraising effort
- Facilitating

Each of these teaching tasks can be performed with little attention to the cues given by the pupils as the teacher is teaching, or the tasks can be performed with much teacher attention being devoted to emerging pupil cues. Presumably adaptive teaching would be more beneficial to Head Start children than would rigid, inflexible teaching. (Teaching responsive to learner cues is not what has been called "permissive teaching.") The Collaboration Scale also permits an analysis of the relative amount of "teaching" done as contrasted with "baby tending." Table 1 and Figures 1 and 2 show for each of the eight classrooms the percentage of teaching behaviors classified according to the Collaboration Scale and also the behaviors that could not be coded. Table 2 and Figures 3 through 10 show the relative proportion of teaching behaviors which can be classified as more collaborative and less collaborative. Considerable variation among the classrooms is evident along all dimensions.

Classroom A

Some notion of what life was like for Head Start children in this classroom may be inferred from the report of the experienced professional observer and from the analysis of the recorded sample of teaching. This classroom was not located in a regular school building but was in the basement of a public building located in perhaps the most disadvantaged area of the city. The classroom, although small by comparison, was well arranged, well equipped, very "homey" and attractive. The pupils were judged to be comparatively high in deprivation. The three diagrams of the classroom drawn by the observer at ten-minute intervals during the recording are shown below.

TABLE 1

PERCENTAGE OF TOTAL TEACHING BEHAVIOR IN EACH CATEGORY FOR EACH CLASSROOM *

Interaction Categories	Classrooms															
	A		B		C		D		E		F		G		H	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Working on Content or Task	77	34	67	45	54	30	26	14	10	11	64	44	80	38	44	36
Providing Focus	14	06	15	10	06	03	04	02	08	09	13	09	07	03	06	05
Development of Focus	31	14	41	27	32	18	17	09	02	02	26	18	54	26	27	22
Giving Information Directly	11	05	04	03	06	03	04	02	00	00	09	06	05	02	09	07
Appraising Effort	21	09	07	05	10	06	01	01	00	00	16	11	14	07	02	02
Maintaining Social Order	107	48	63	42	99	55	124	67	61	64	64	44	90	42	56	46
Setting Expectations	18	09	03	02	14	08	09	05	06	06	06	04	24	11	04	03
Implementing Action	48	21	31	21	37	20	31	17	22	23	37	25	45	21	22	18
Appraising Effort	41	18	29	19	48	27	84	45	33	35	21	15	21	10	30	25
Sub Total	184	-	130	-	153	-	150	-	71	-	128	-	170	-	100	
Facilitating	41	18	03	02	08	04	12	07	12	13	02	01	11	05	19	16
Sub Total	225	-	133	-	161	-	162	-	83	-	130	-	181	-	119	-
Behavior Not Coded	01	00	17	11	20	11	23	12	11	12	17	11	32	15	03	01
Total	226	100	150	100	181	100	185	100	94	100	147	100	213	100	122	100

* Total for this table refers to the total number of teaching acts identified during the tape recording.

TABLE 2

PROPORTION OF CLASSROOM TEACHING BEHAVIOR IN EACH CATEGORY
SHOWN AS PERCENTAGE ALONG A COLLABORATION SCALE *

Interaction Categories	Classrooms															
	A		B		C		D		E		F		G		H	
	LC	Tot	LC	Tot	LC	Tot	LC	Tot	LC	Tot	LC	Tot	LC	Tot	LC	Tot
Working on Content or Task	.32	.42	.17	.52	.21	.35	.07	.17	.04	.14	.24	.50	.40	.47	.21	.44
Providing Focus	.02	.08	.06	.12	.03	.04	.00	.03	.01	.11	.03	.10	.04	.04	.01	.06
Development of Focus	.15	.17	.05	.32	.13	.21	.05	.11	.03	.03	.08	.20	.28	.32	.11	.27
Giving Information Directly	.05	.06	.01	.03	.01	.04	.02	.03	.00	.00	.04	.07	.01	.03	.07	.09
Appraising Effort	.10	.11	.05	.05	.04	.06	.00	.00	.00	.00	.09	.13	.07	.08	.02	.02
Maintaining Social Order	.26	.58	.26	.49	.39	.65	.11	.83	.24	.86	.24	.50	.35	.53	.32	.56
Setting Expectations	.07	.10	.02	.02	.08	.09	.03	.06	.06	.08	.03	.05	.14	.14	.04	.04
Implementing Action	.10	.26	.11	.25	.08	.24	.01	.21	.04	.32	.09	.29	.10	.27	.12	.22
Appraising Effort	.09	.22	.13	.22	.23	.32	.07	.56	.14	.46	.12	.16	.11	.12	.16	.30

* LC = Less Collaborative

Total for this table refers to the number of teaching acts classified as both more collaborative and less collaborative. (Acts not codeable and facillitating acts are not included.)

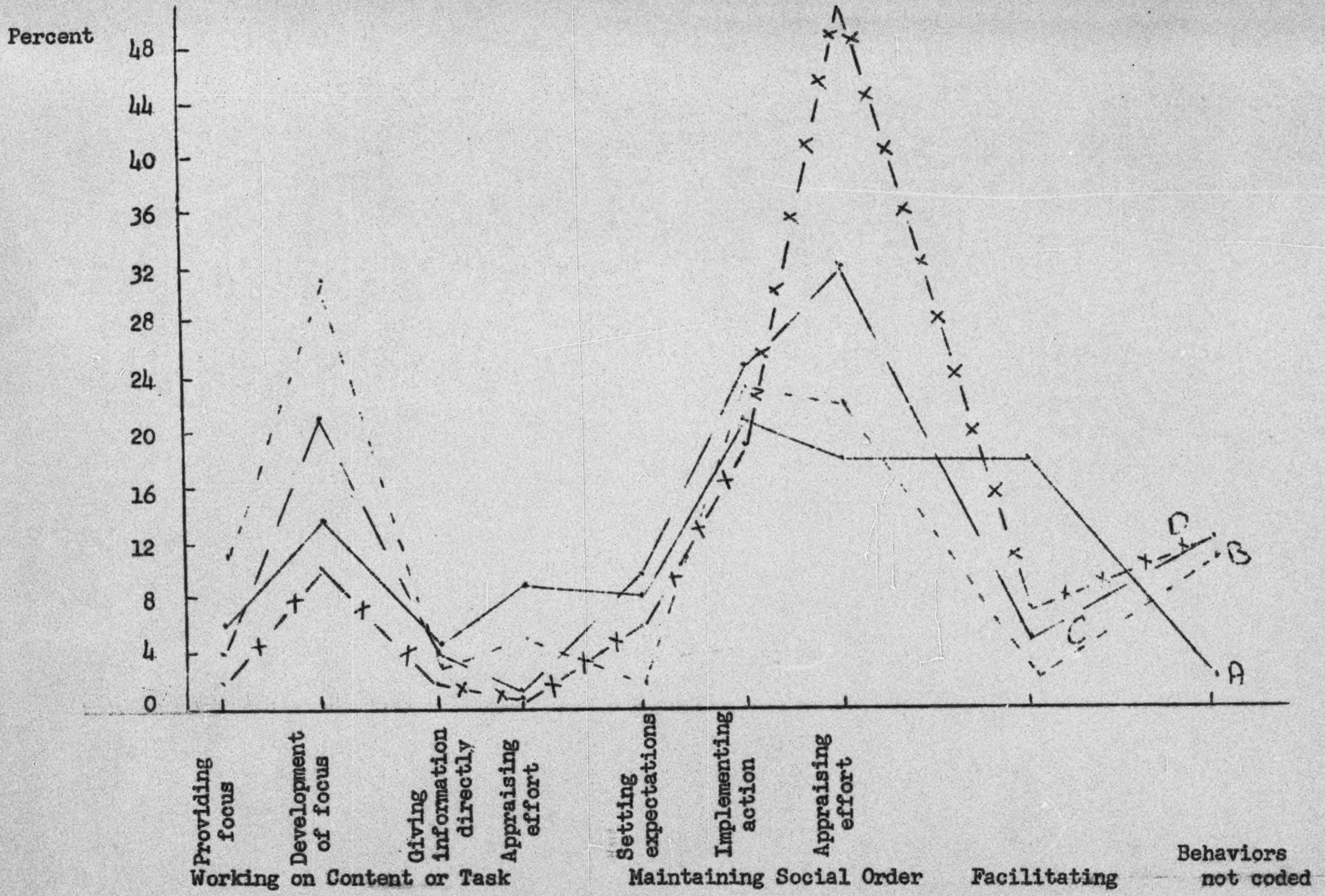


FIGURE 1

COMPARISON OF TOTAL CODED BEHAVIOR
IN EACH CATEGORY FOR TEACHING IN
CLASSROOMS A, B, C, AND D.

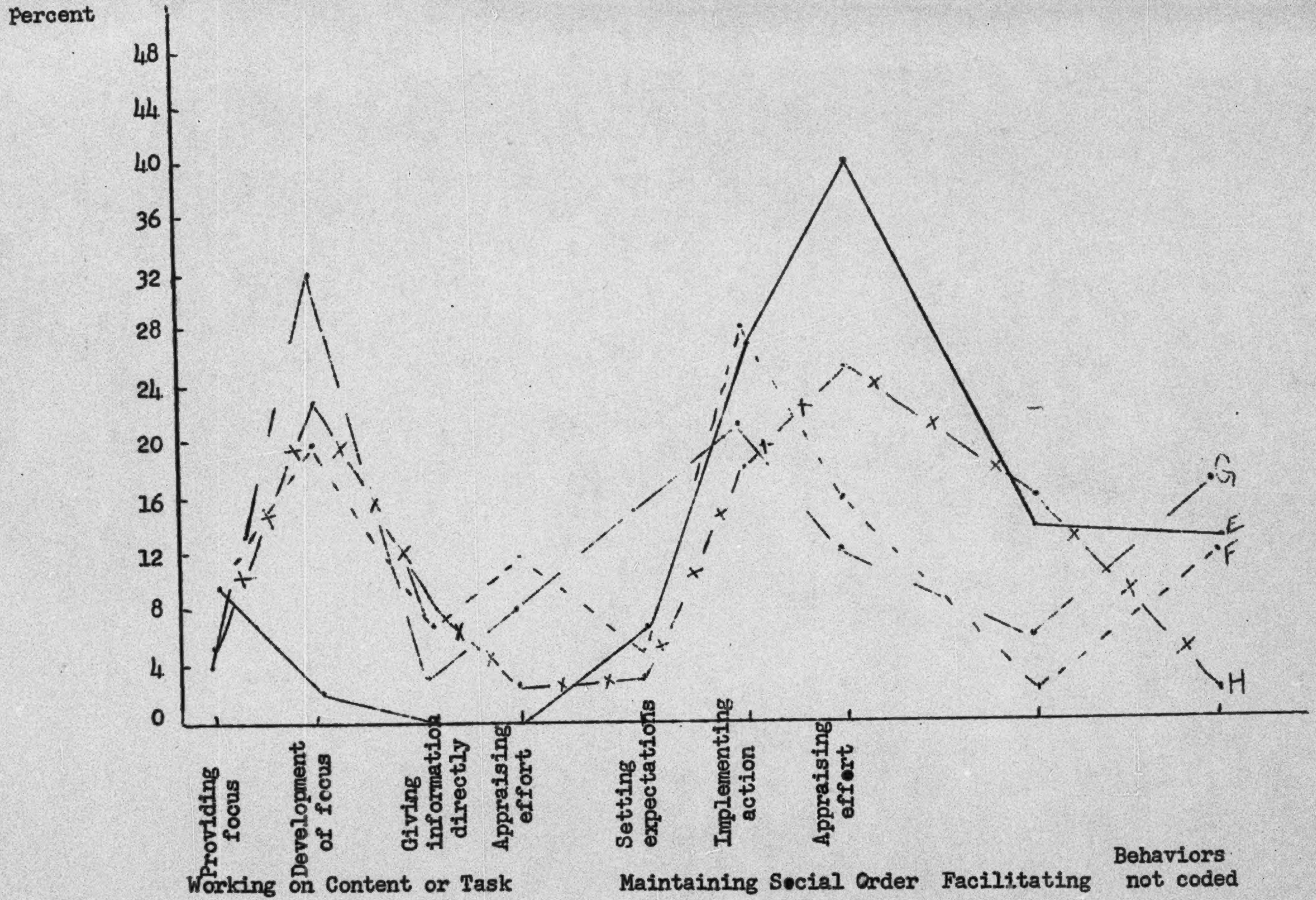
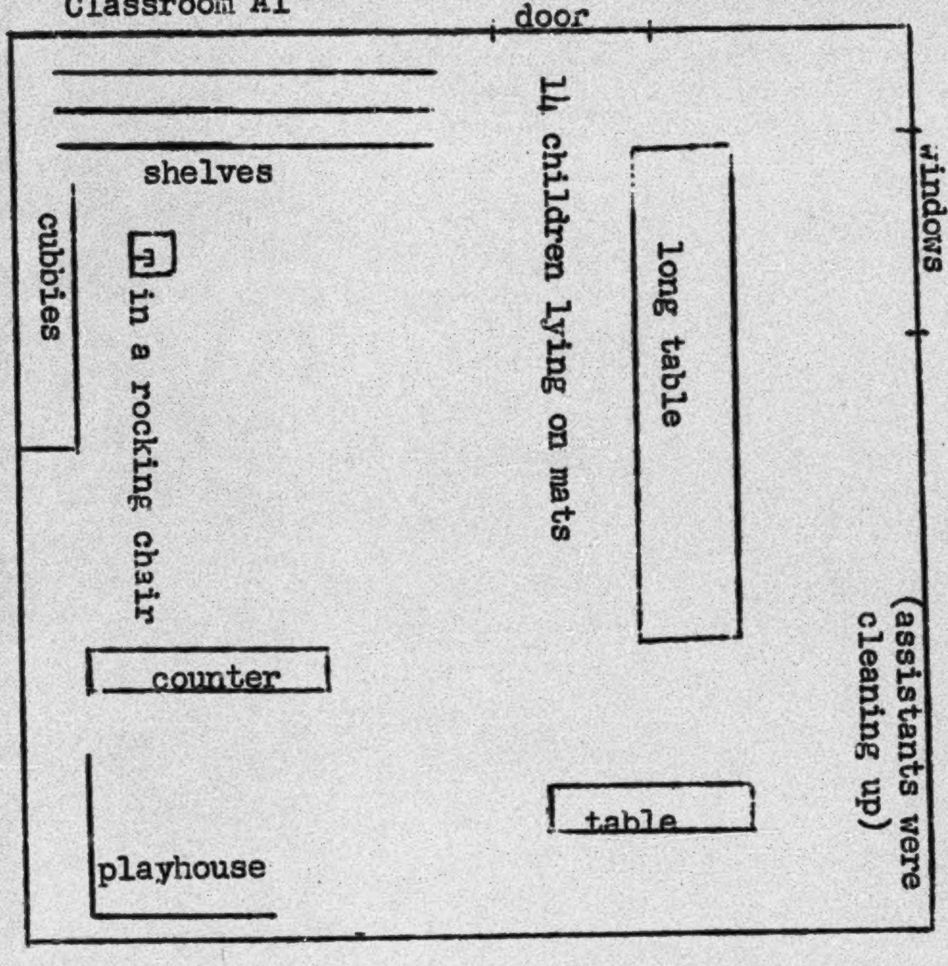


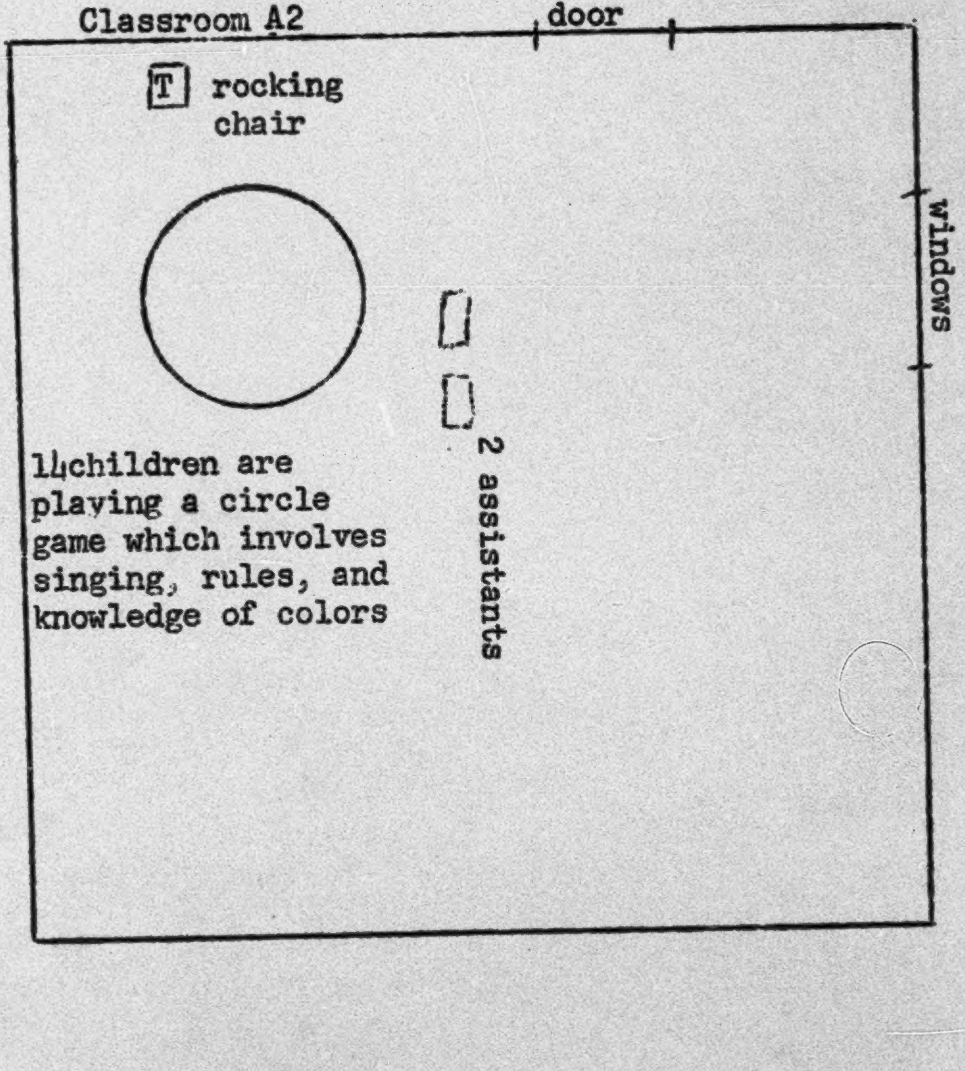
FIGURE 2

COMPARISON OF TOTAL CODED BEHAVIOR IN EACH CATEGORY FOR TEACHING IN CLASSROOMS E, F, G, AND H.

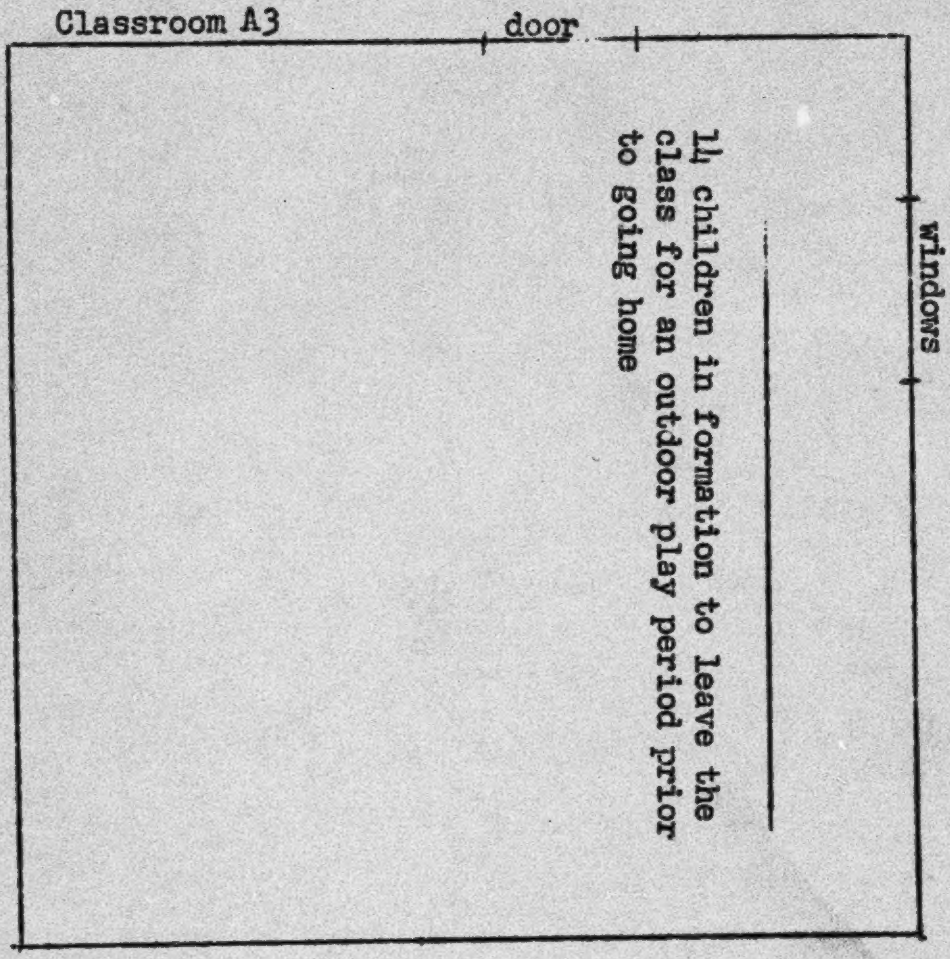
Classroom A1


door
shelves
cubbies
T in a rocking chair
14 children lying on mats
long table
windows
counter
table
(assistants were cleaning up)
playhouse

Classroom A2


door
T rocking chair
windows
14children are playing a circle game which involves singing, rules, and knowledge of colors
2 assistants

Classroom A3


door
windows

14 children in formation to leave the class for an outdoor play period prior to going home

Tables 1 and 2 and Figures 1 and 3 indicate that the teaching in Classroom A was rather directive, and that there was unusually good balance among the teaching functions. In content areas and in setting expectations there was little open-endedness, but in implementing pupil action and appraising effort there was considerable openness for pupils. Almost 50 percent of the teaching acts were concerned with content and its development with slightly more than that devoted to building and maintaining social order. In general Figure 3 represents a profile of teaching rather than a profile of day-care tending. During this thirty-minute period the pupils were involved in a structured, consistent and balanced learning experience.

Comments by the observer tend to be in agreement with the analysis of the recorded sample of teaching. Teaching in this classroom was seen to be rather confident, structured, loving, resourceful, experienced and competent. A wealth of pictures, objects, books and games were available to enrich the learning experience in general and to provide specific stimulation for conversation and language development. The teaching strategy was thought to be focused upon instruction and program. Deliberate attention was given both to teaching the necessary ways of responding in school and to cognitive development.

Classroom B

This was judged to be a very attractive educational facility in a neighborhood that, while lower income, probably should not be classified as "deprived." Classroom conditions and the extra classroom spaces available together with the abundance of equipment, books and supply materials on hand undoubtedly constituted a "lush" physical

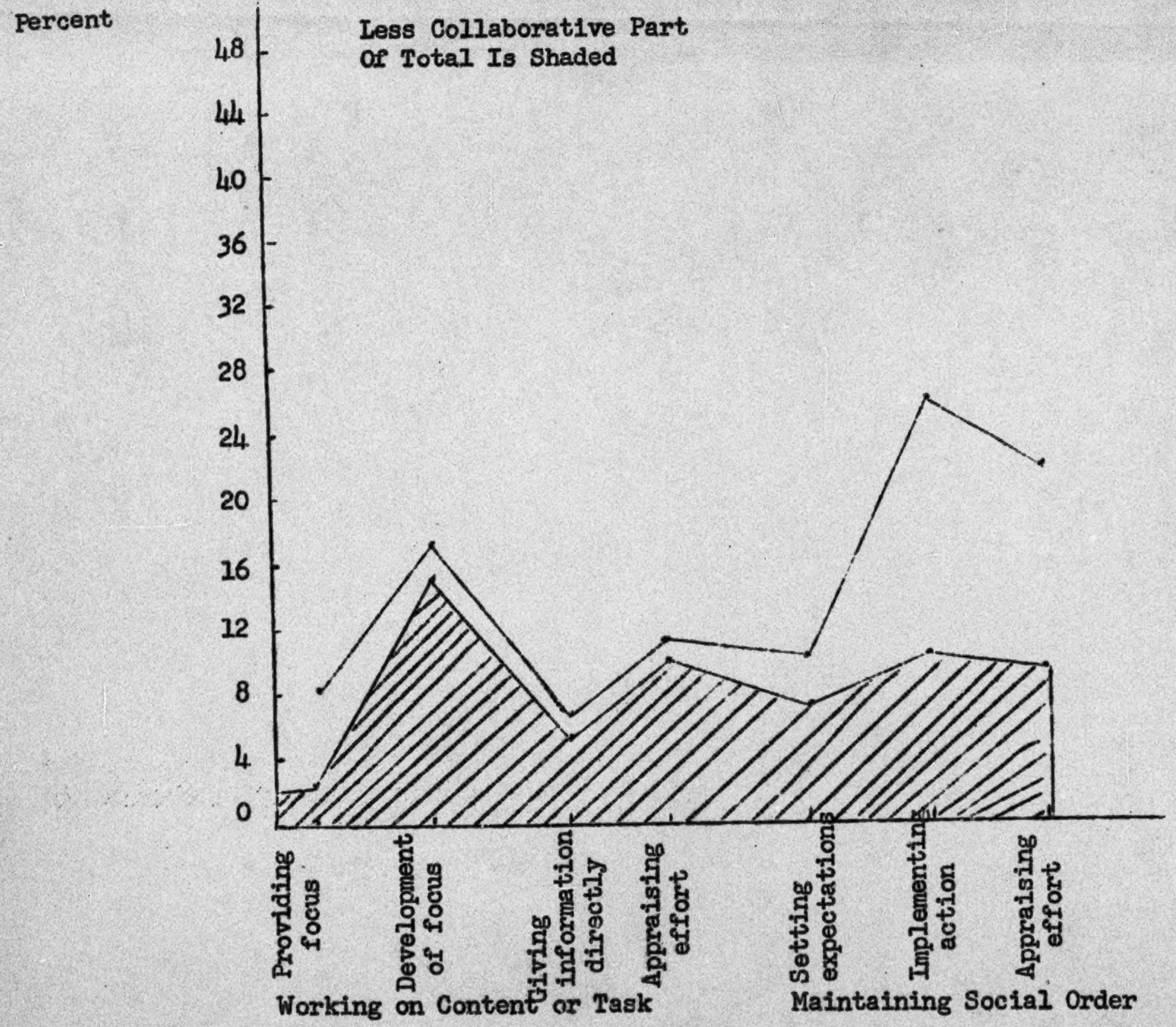
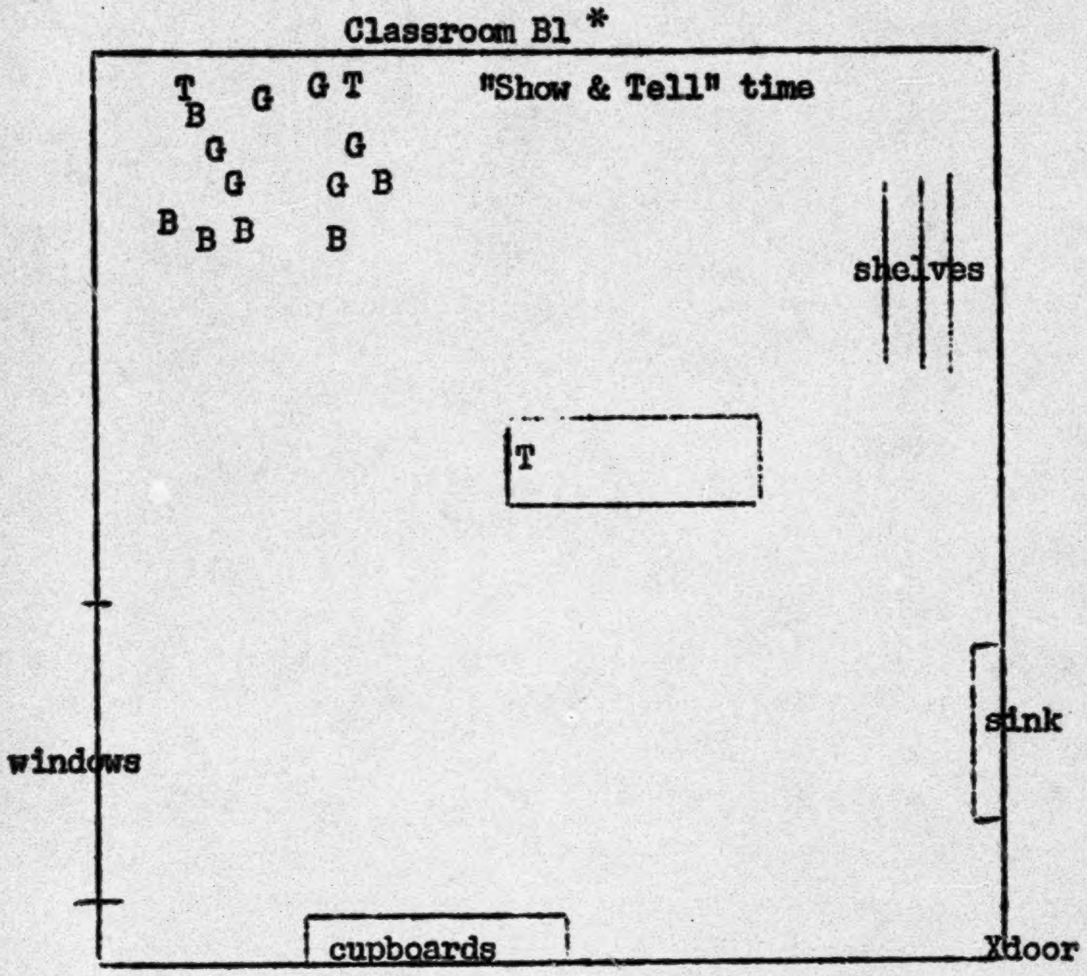
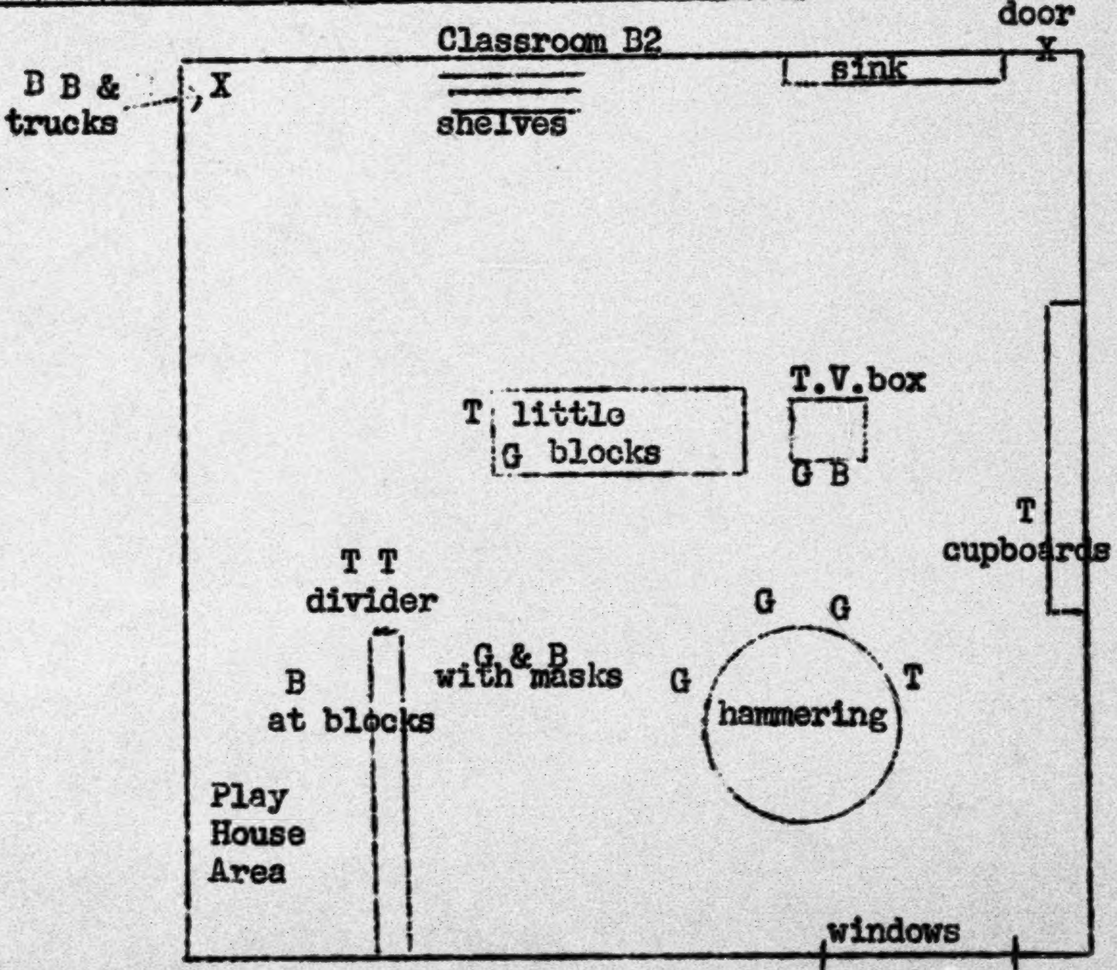


FIGURE 3

PROPORTION OF CODED BEHAVIOR IN EACH CATEGORY, PROPORTION MORE COLLABORATIVE AND PROPORTION LESS COLLABORATIVE FOR TEACHING IN CLASSROOM A learning environment. The two diagrams below suggest a view of the classroom at two times during the recording of the classroom session.


Classroom B1 *
"Show & Tell" time
T
B
G
G T
G
G
G
G B
B
B
B
B
shelves
T
windows
sink
cupboards
Xdoor


Classroom B2
door
X
B B &
trucks
X
shelves
sink
T.V.box
T
little
G
blocks
G B
T
cupboards
T T
divider
G G
G & B
with masks
G
T
hammering
B
at blocks
Play
House
Area
windows

---

* Letters refer to position of teachers (adults), boys, and girls.

Figures 1 and 4 and Tables 1 and 2 provide a general notion of the non-physical learning climate for the children in classroom B. It can be seen that for the sample of classrooms, this was the most collaborative classroom. Not only was there considerable open-endedness for children, but there was a high proportion of content development. Especially significant was the frequent incidence of teacher response to and clarification of pupil comments. Pupil concepts were frequently clarified and extended. Although an over-all balance among the teaching functions performed was not indicated except for the relative infrequency of setting expectations explicitly, this lack of balance was probably not significant. Compared to others in the sample there was a high incidence of providing focus by the teachers in this classroom which indicated a more deliberate concern for content aspects.

The observer viewed this instructional program as well planned but flexible. Instructional goals, both short and long range, were clear, and the materials necessary in working toward them were available. Careful advance planning made possible using or discarding planned activities as was judged appropriate. The error of viewing activities as ends in themselves so common in early childhood education was avoided. Over-all the observer detected high morale in the classroom: "The atmosphere was one of organization, freedom, security, and realization." Since the teaching had been "experimental," the observed program represented what the teachers judged to be the best balance between openness and structure for the particular group of children involved.

Classroom C

The observer noted that this unit represented perhaps the poorest "traditional facility" in the sample. The two diagrams of the classroom drawn by the observer during the recording period are shown below.

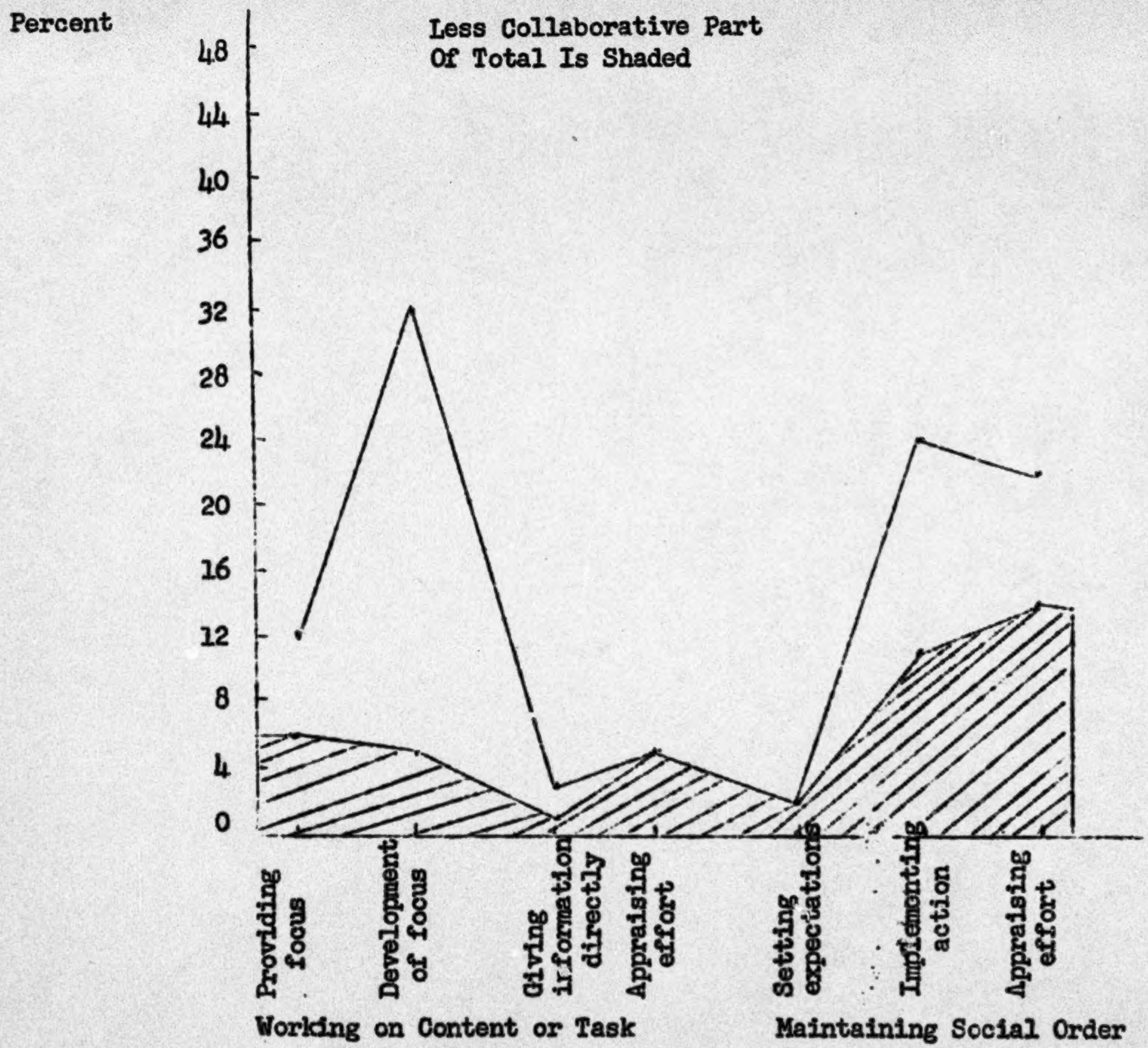
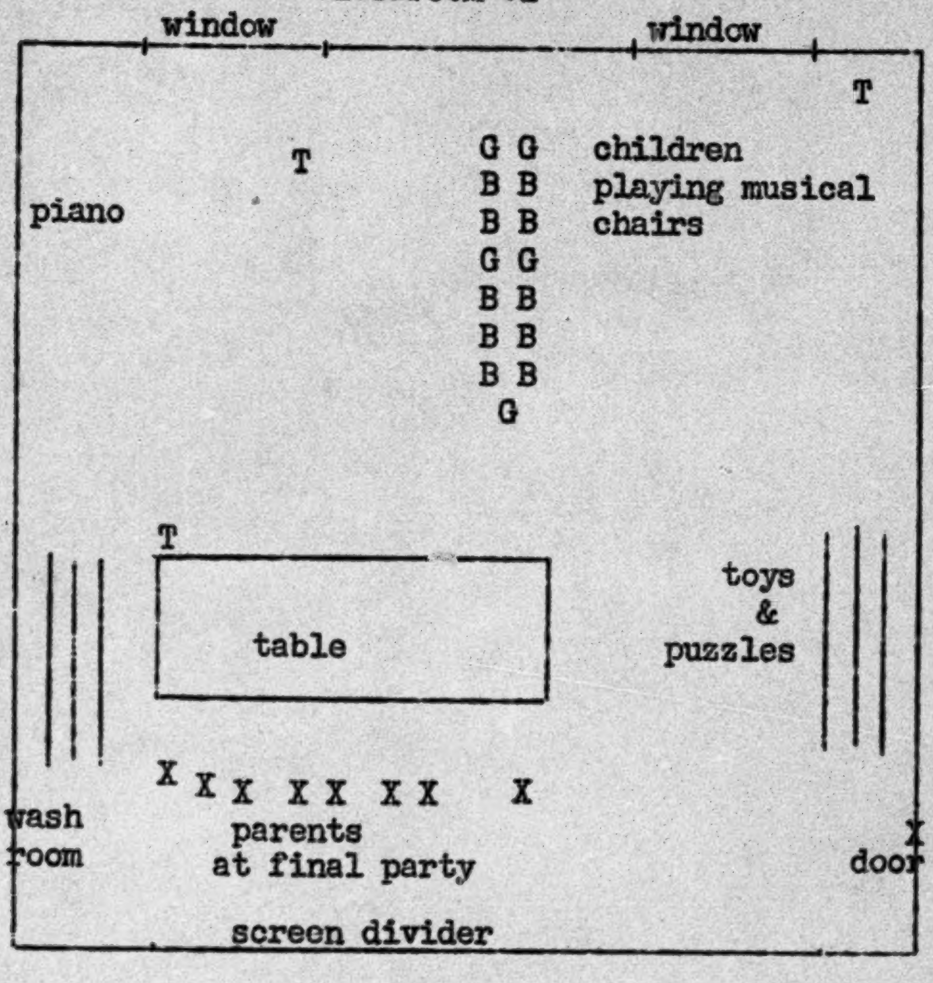


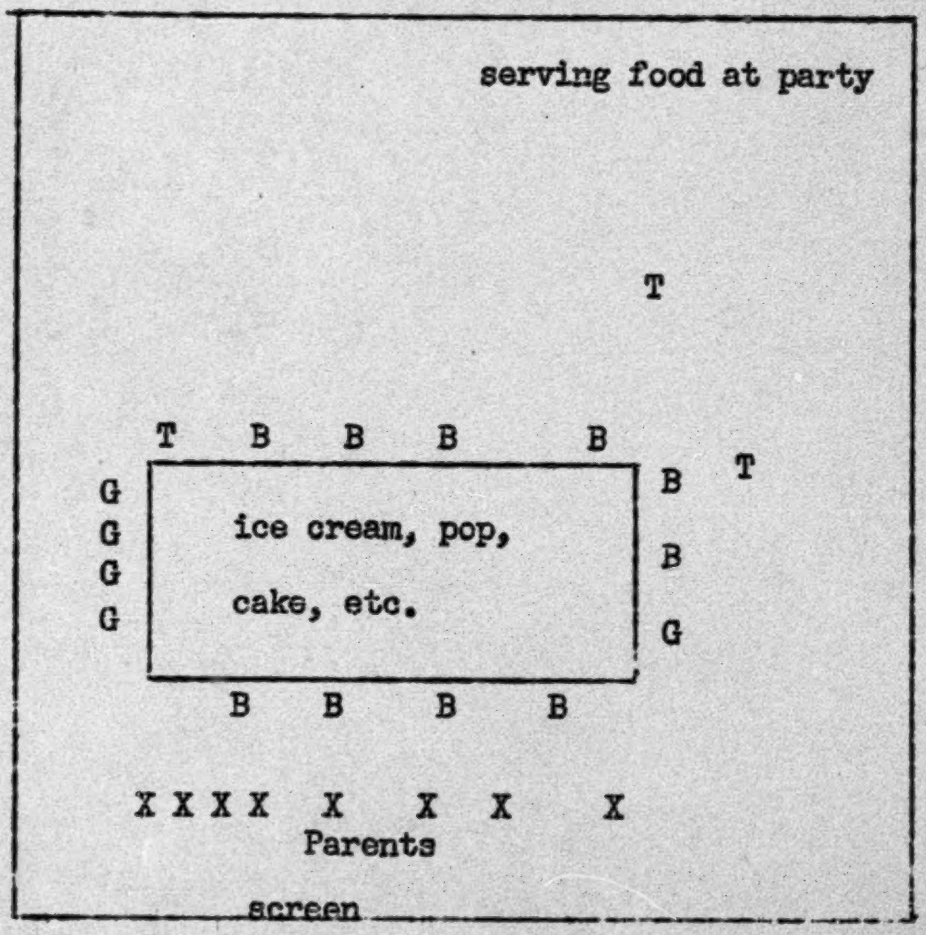
FIGURE 4

PROPORTION OF CODED BEHAVIOR IN EACH CATEGORY, PROPORTION MORE COLLABORATIVE AND PROPORTION LESS COLLABORATIVE FOR TEACHING IN CLASSROOM B

Classroom C1


window
window
T
T
G G
B B
B B
G G
B B
B B
B B
G
children playing musical chairs
piano
T
table
toys & puzzles
X X X X X X X X
parents at final party
wash room
X
door
screen divider

Classroom C2


serving food at party
T
T B B B B
T
B
B
G
G
G
G
G
ice cream, pop, cake, etc.
B B B B
X X X X X X X X
Parents
screen

Tables 1 and 2 and Figures 1 and 5 indicate that classroom C ranked seventh among the eight classrooms in terms of teacher-pupil collaboration. In this classroom the teachers (teacher and aids) were responding less directly to pupil cues than were most of the teachers, but the balance is relatively good. The analysis indicates that during this period the children had less work on content concerns and relatively greater instruction in how to behave properly. However, compared to other classrooms, the relative emphasis upon content was better than average.

The analysis from the teaching protocol is substantiated by the remarks of the professional observer knowledgeable about the classroom. The observer saw the teaching in this classroom as kind and loving, but concerned primarily with individuals without sufficient attention being directed to skillful management of the group or of the classroom environment. Intellectual objectives were reached incidentally as the teacher engaged individual children in brief conversation during arts and crafts periods. More directly, children in this classroom had the stimulation of more excursions and organized trips than children in any other classroom in the sample.

Classroom D

The physical features of classroom D were judged by the observer to be among the best in the sample. A quantity of new equipment served to make the classroom seem wholesome. The diagram below indicates the physical state of affairs at one time during the tape recording period.

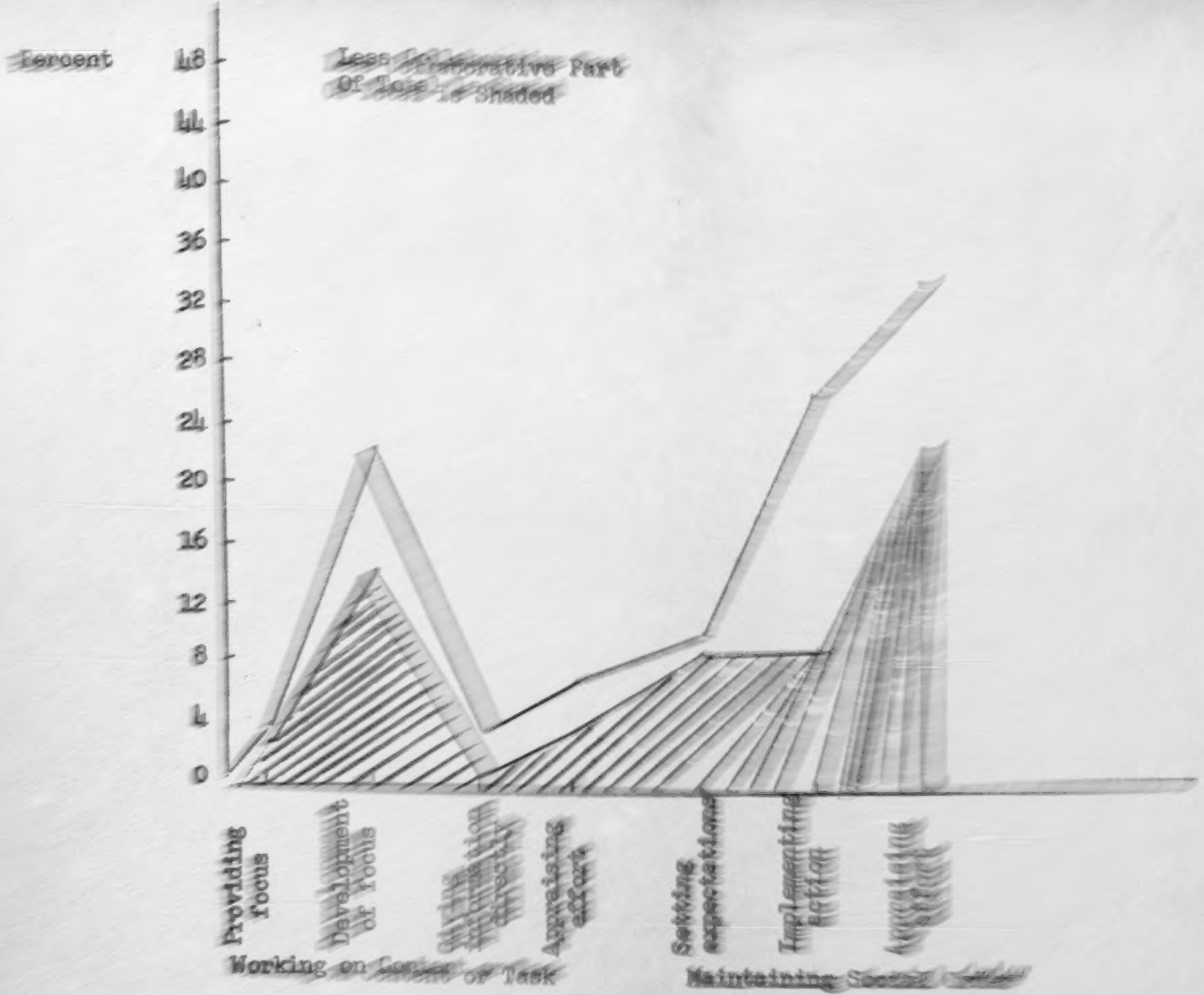
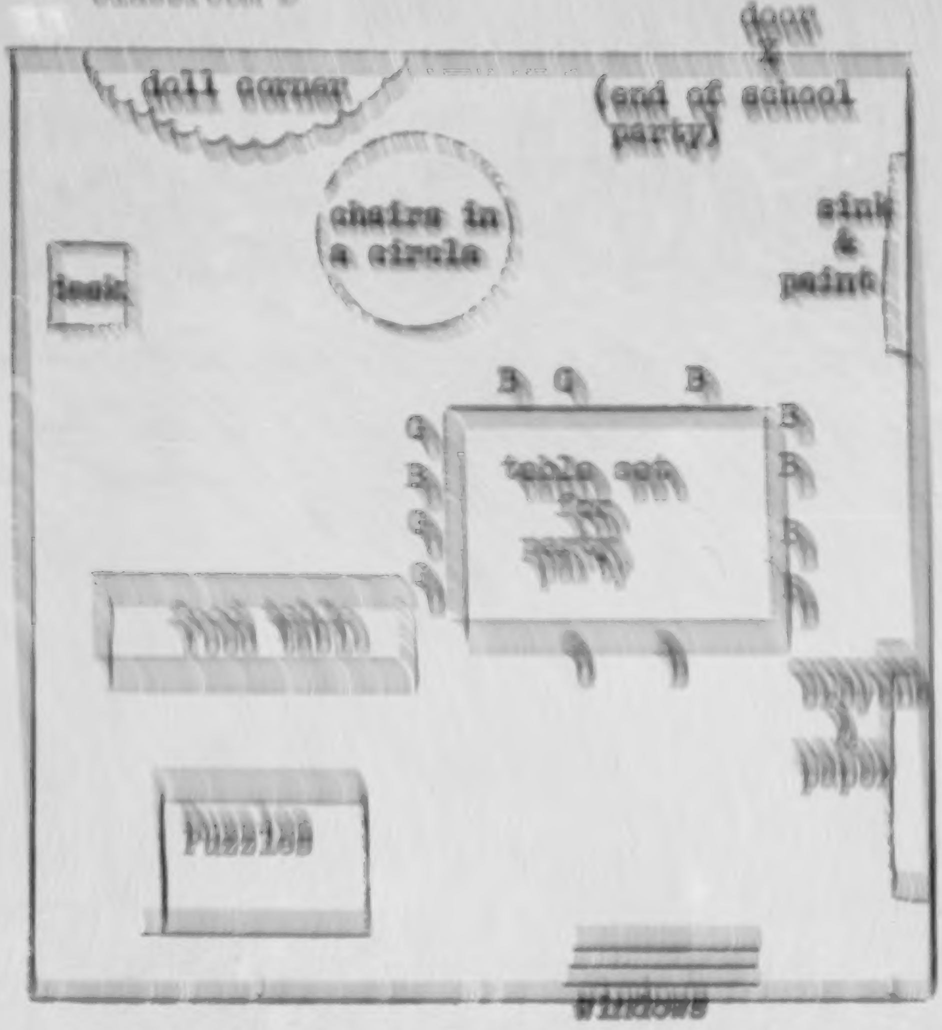


FIGURE 5
PROPORTION OF CODED BEHAVIOR IN EACH CATEGORY, PROPORTION MORE COLLABORATIVE
AND PROPORTION LESS COLLABORATIVE FOR TEACHING
IN CLASSROOM C

Classroom D


door
(end of school party)
doll corner
chairs in a circle
desk
sink & paint
B
G
B
G
B
G
G
B
B
B
table set for party
crayons & paper
Puzzles
windows

Tables 1 and 2 and Figures 1 and 6 indicate that pupils in classroom D experienced the most collaborative teaching of any classroom, but balance was lacking. Teachers in classroom D provided open-endedness in the relatively few questions asked and assignments made, as well as in implementory action and in appraising pupil behavior. However, there was very little direct work on content, its development or its evaluation, and little setting of expectations before pupil action. Teacher expectations were communicated almost entirely through response to pupil trial and error. Pupils were expected to engage in action with little or no advance planning or instruction but were then rewarded or punished after taking action. The ratio of teaching content to "keeping house" was extreme and was the lowest among the sample classrooms. Some 83 percent of the teaching acts was devoted to keeping order and almost 60 percent was rewarding or punishing pupil behavior.

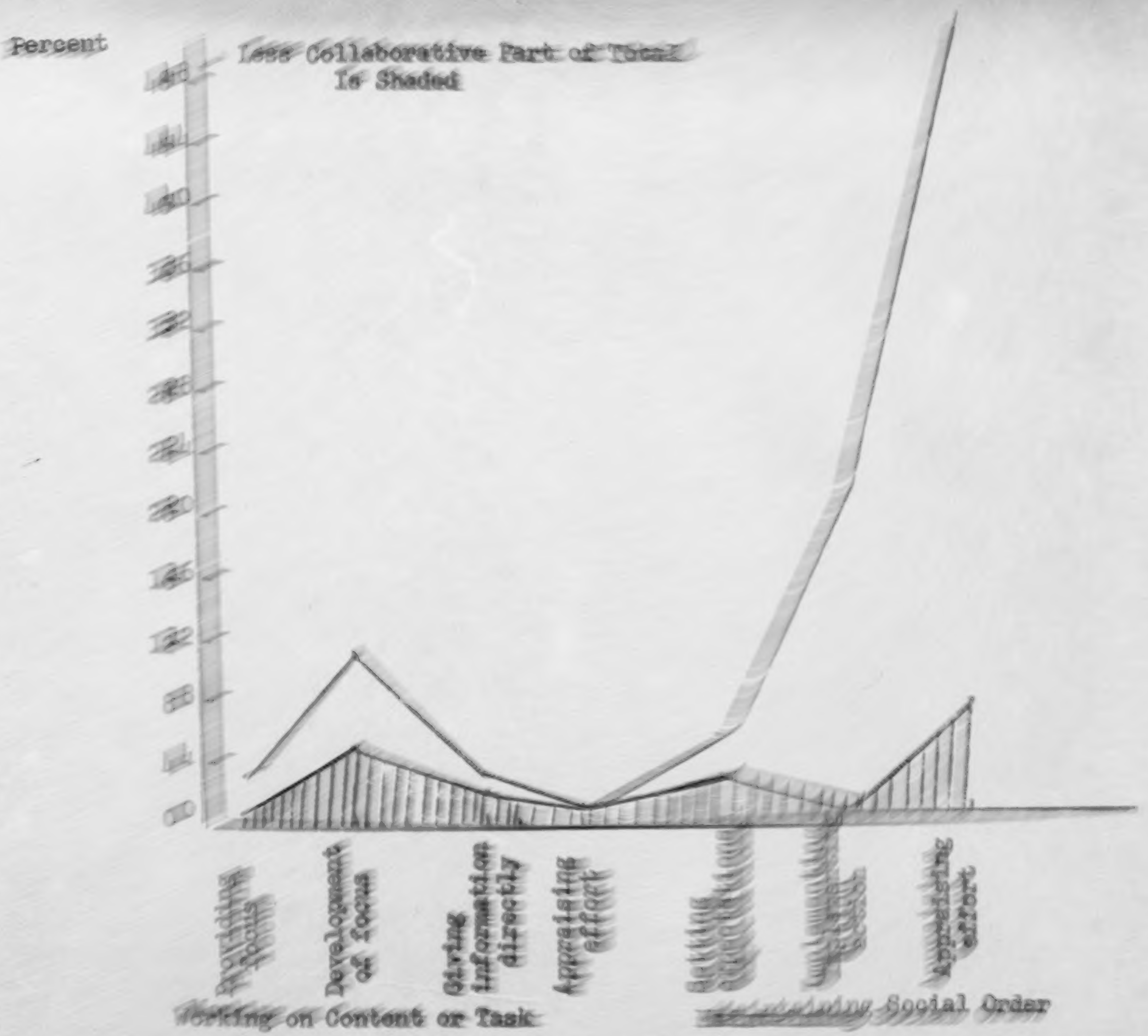


FIGURE 6

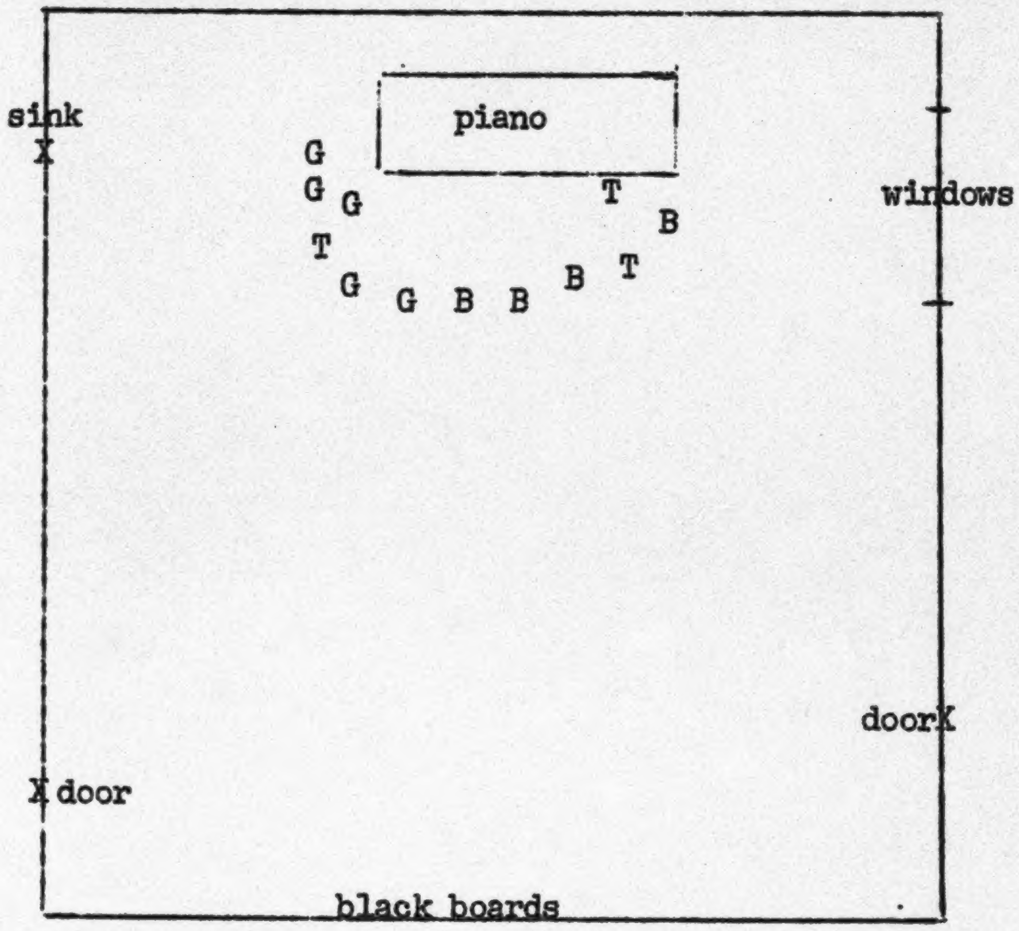
PROPORTION OF CODED BEHAVIOR IN EACH CATEGORY, PROPORTION MORE COLLABORATIVE, AND PROPORTION LESS COLLABORATIVE IN TEACHING IN CLASSROOM I

The analysis of the teaching protocol is again substantiated by the remarks of the observer. This classroom program was seen to resemble that of a day care center more than a school. The teaching (tending) was kind, loving and concerned, but inept. There was little or no deliberate arrangement of the classroom environment to promote language development, to facilitate learning in general, or even to promote orderly group living. The school day was characterized as the development of large muscles in outside play and as small muscle play inside. The teachers seemed to be lacking in both training and experience. The observer believed this classroom experience for children to be perhaps the weakest among those sampled.

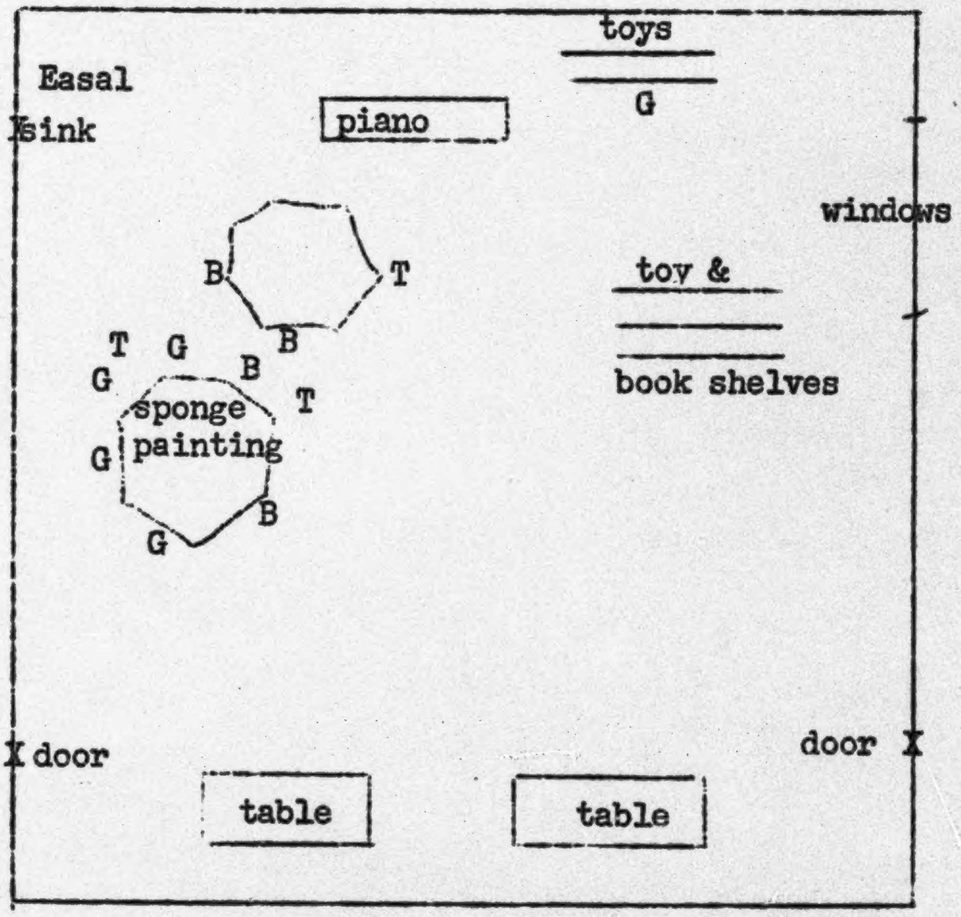
Classroom E

The physical facilities associated with Classroom E were considered to be considerably better than average. The building was modern, the classroom was well kept and attractively decorated. Although there was less equipment available than might have been expected, it was considered to be adequate. The equipment was new, inviting, and educationally sound. An abundance of consumable arts and crafts materials were on hand. The arrangement of the furniture and other equipment did not contribute to the success of the educational program; there seemed to have been no planning for the effective use of space or equipment. The two diagrams following provide some feeling for the nature of classroom life during the brief session recorded on tape.

Classroom E1


sink
X
piano
G
G G
T
G G B B B
T
B
T
windows
doorX
X door
black boards

Classroom E2


toys
G
Easal
Xsink
piano
windows
B
T
B
T G
G
B
T
sponge
painting
G
B
G
toy &
book shelves
X door
door X
table
table

Figures 2 and 7 and Tables 1 and 2 permit a general analysis of school life for pupils in classroom E. Since the record was short, the description must be viewed even more tentatively than for other classrooms in the sample. Except for classroom D, pupils in this classroom received less help in content and more "tending" than did pupils in any of the other classrooms observed. Less than 15 percent of the teaching behavior was directly concerned with developing content or task objectives. Most of the teaching attention was given to regulating pupil behavior and to rewarding or punishing pupil actions. Some 40 percent of teaching behavior was classified as appraising effort. On the whole, however, the regulating and appraising of pupil activity was done with concern and consideration.

The observer considered the teaching done during the recording to be a routine performance or "safe" show for an "inspector." Children appeared to be put through their "paces" in routinized activities. In spite of the use of endearing phrases, the teaching was seen to be distant, reserved, unimaginative, and stereotyped. There was little evidence that pupils were taken on educational excursions beyond the classroom. Lack of attention to educational concerns seem to have left pupils in this situation with a happy, sheltered place to spend a part of the summer.

Classroom F

The physical features of classroom F were very similar to classroom E. The room was modern, attractive, and conveniently arranged. The rather generous supply of new equipment was effectively arranged in spaces created to facilitate pupil learning. There was a generous supply of arts and crafts materials, but little evidence, however, of effective

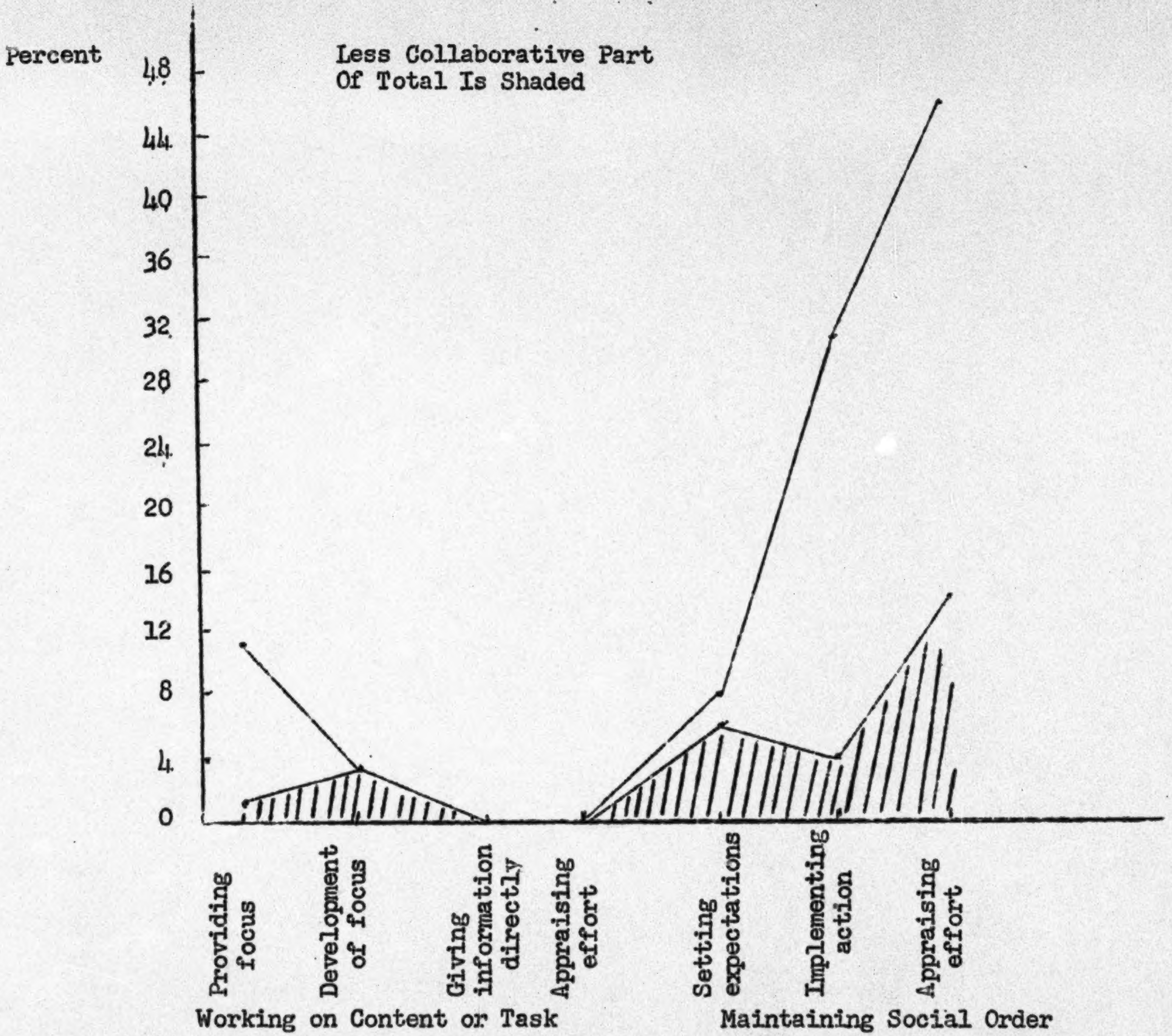
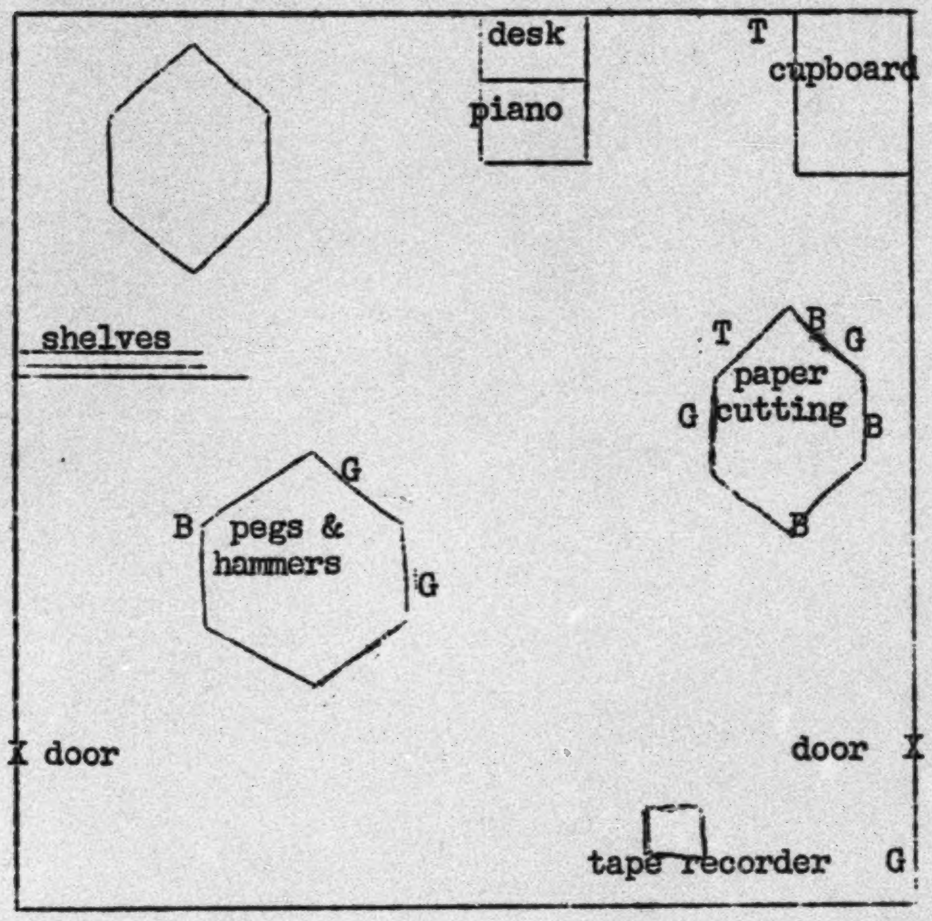


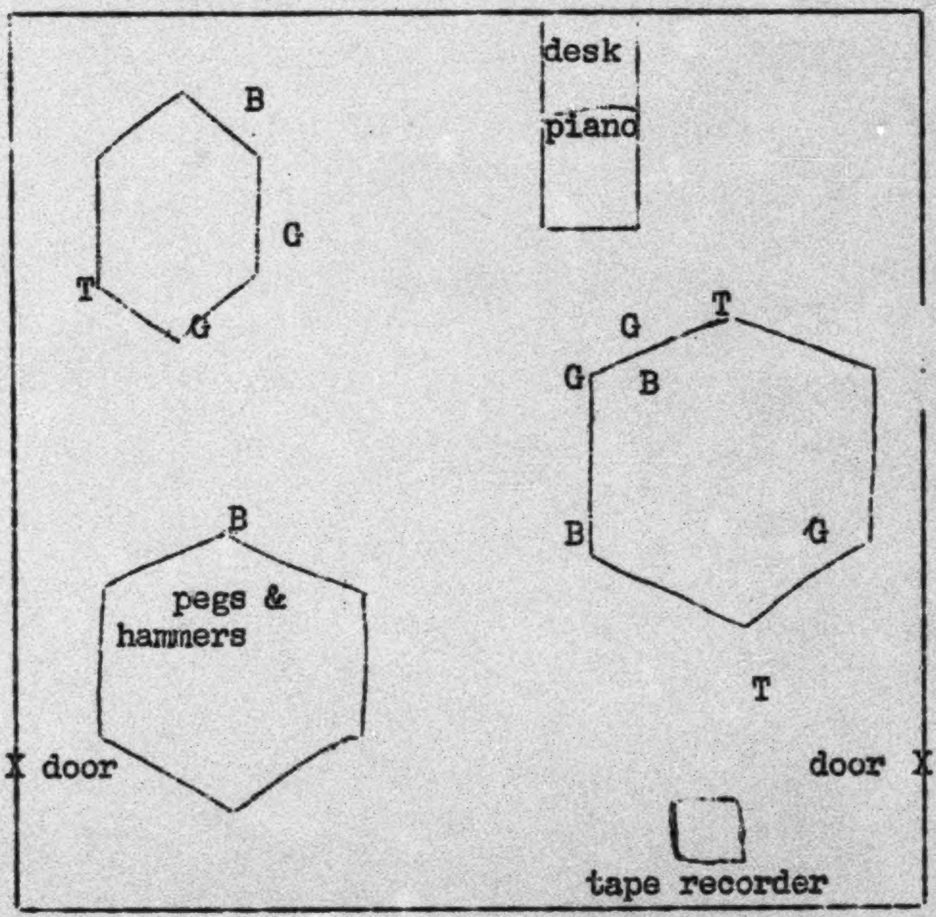
FIGURE 7

PROPORTION OF CODED BEHAVIOR IN EACH CATEGORY, PROPORTION MORE COLLABORATIVE, AND PROPORTION LESS COLLABORATIVE FOR TEACHING IN CLASSROOM E pupil use of such materials. The diagrams below provide three views of the classroom during the recorded session. It is an interesting fact, confirmed in the observer's written report, that the teacher remained seated at the table during the entire thirty minutes.

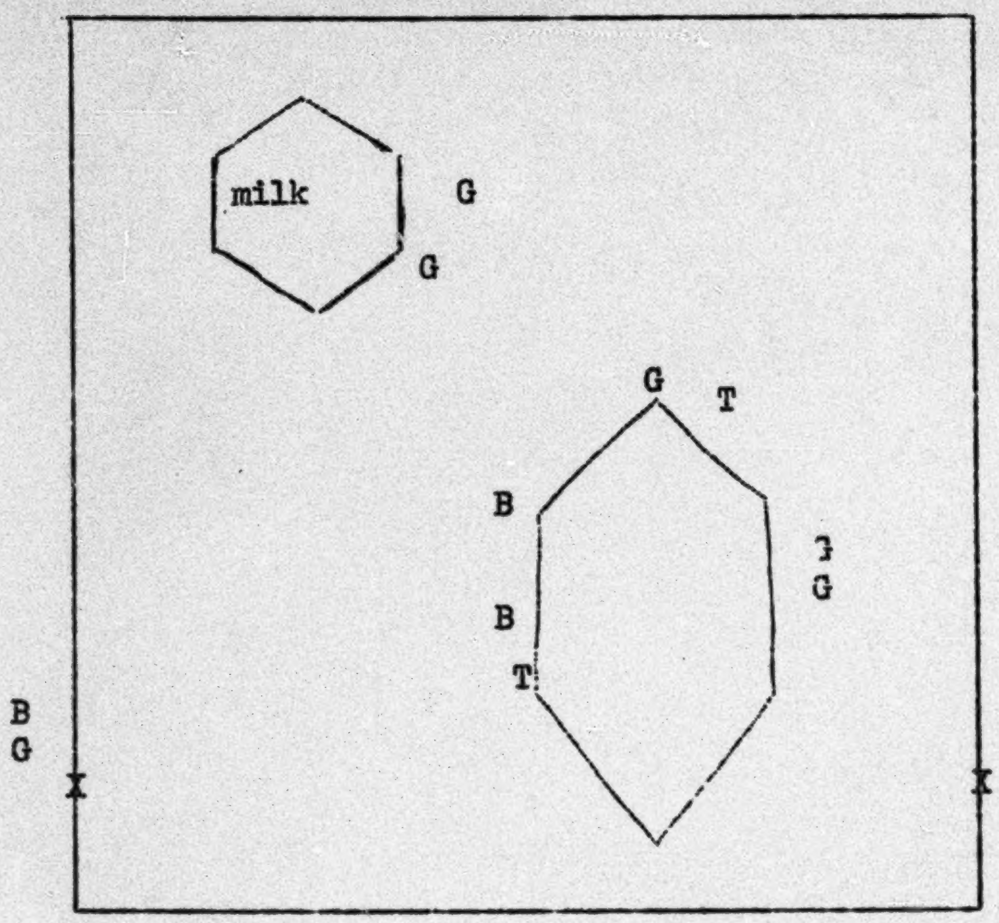
Classroom F1


desk
piano
T
cupboard
shelves
T
B
G
paper cutting
G
B
B
G
B
pegs & hammers
G
X door
door X
tape recorder
G

Classroom F2


desk
piano
B
G
T
G
G
T
G
B
B
G
B
pegs & hammers
T
X door
door X
tape recorder

Classroom F3



Figures 2 and 8 and Tables 1 and 2 provide a basis for the analysis of teaching during the recorded classroom session. Teaching behaviors were equally distributed between working on content or task and maintaining social order. The proportion of collaborative behavior was roughly comparable to that classified as less collaborative. The amount of personalized interactions with individuals was the most distinctive aspect. Largely on an individual basis and with considerable openness for pupils, the teacher raised questions, clarified responses, gave directions, met requests, and appraised efforts. The pupils appeared to have a well rounded educational experience.

The observer's report reflected a genuine respect for the quality of the classroom experience. The teacher was seen to have clear educational goals and to have planned effectively for the achievement of the

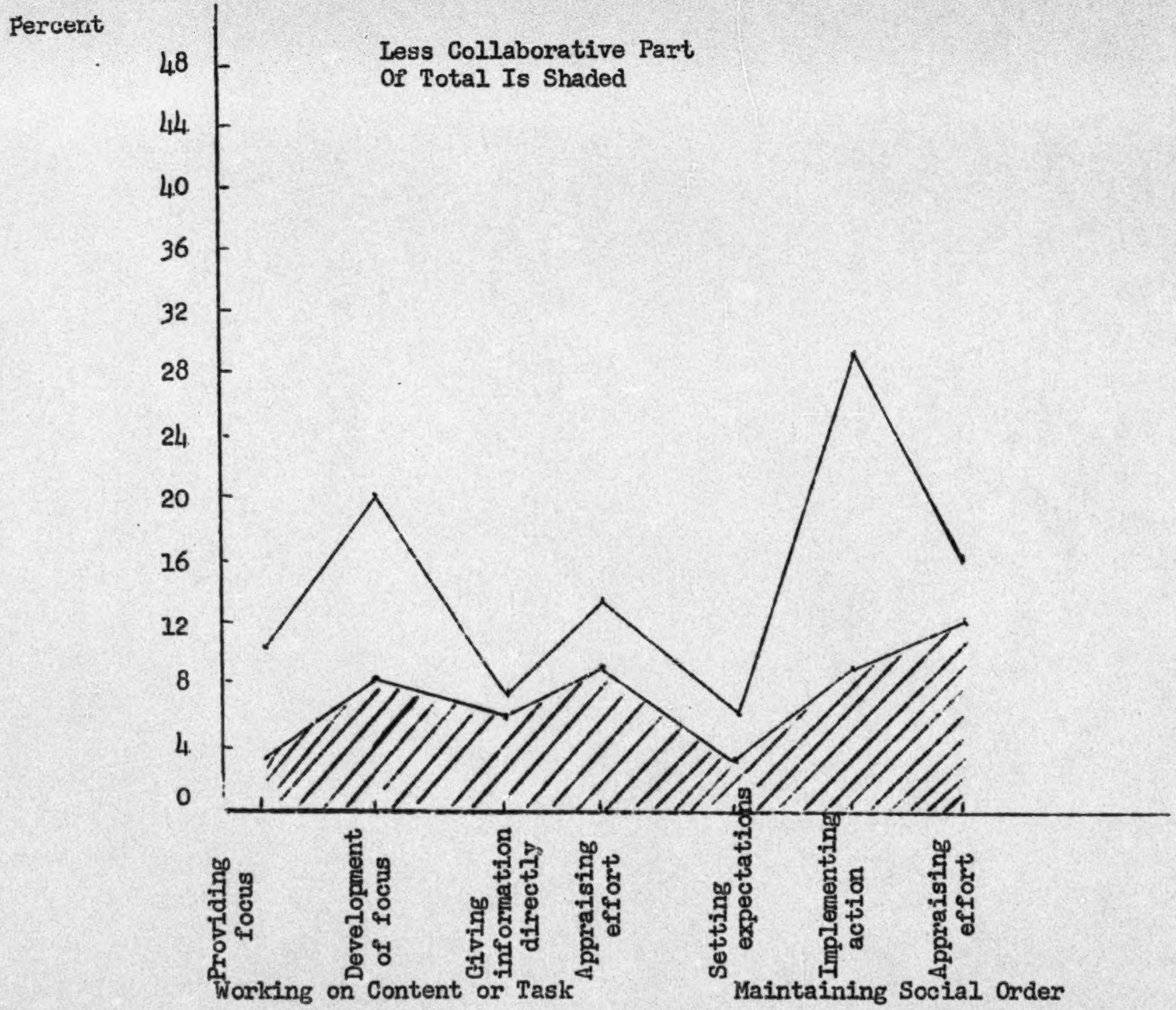


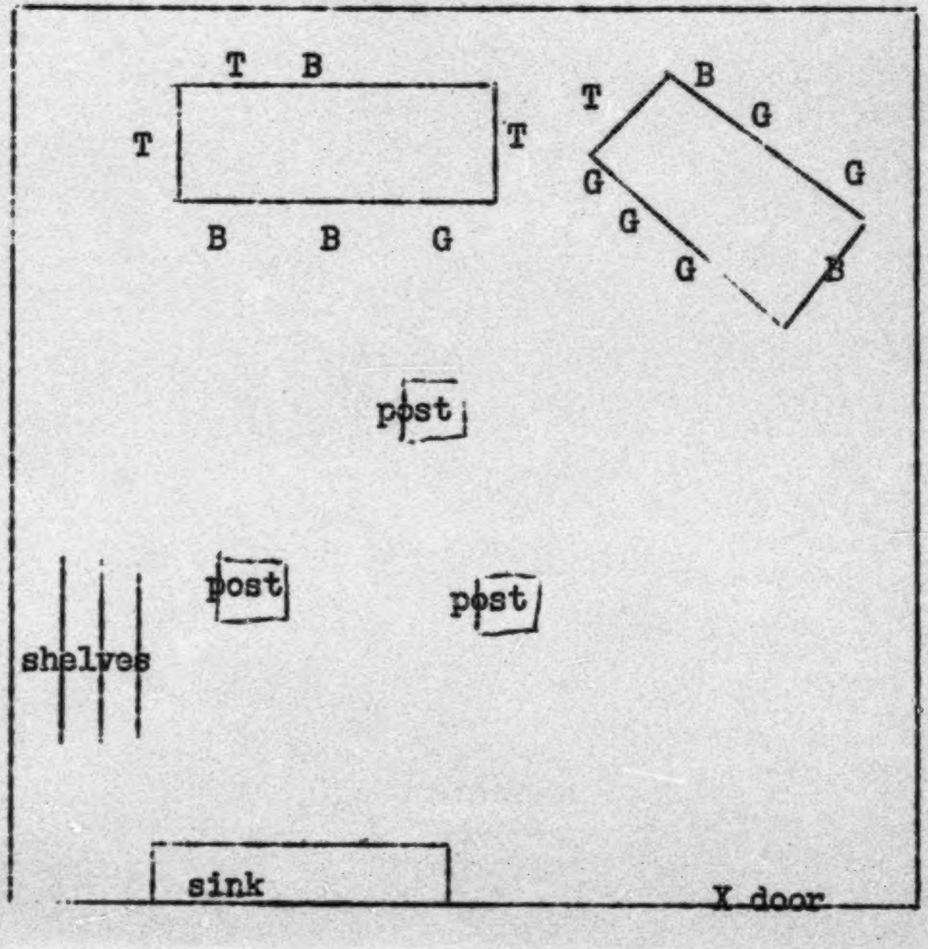
FIGURE 8

PROPORTION OF CODED BEHAVIOR IN EACH CATEGORY, PROPORTION MORE COLLABORATIVE AND PROPORTION LESS COLLABORATIVE FOR TEACHING IN CLASSROOM F goals. The direction of the games, the quality of the conversation, the use of spaces and equipment were judged to be superior. Only in arts and crafts did the program seem to be lacking. Over-all the teaching was reported as calm, friendly, loving, consistent, and confident.

Classroom G

Classroom G was seen as unique in several respects. The physical facilities were judged to be unconventional, contrived, not very attractive and not entirely desirable. Little educational equipment was available, but there was adequate sports equipment and a sufficient supply of arts and crafts materials. Compensating features included a spacious and interesting "back yard" and the general location of the facility. The children were bussed to the classroom from another neighborhood so that exploring the different and educationally varied neighborhood constituted a rich learning experience for the Head Start children. The diagrams below give a picture of the classroom activity at two times during the recorded teaching session.

Classroom G1



Classroom G2

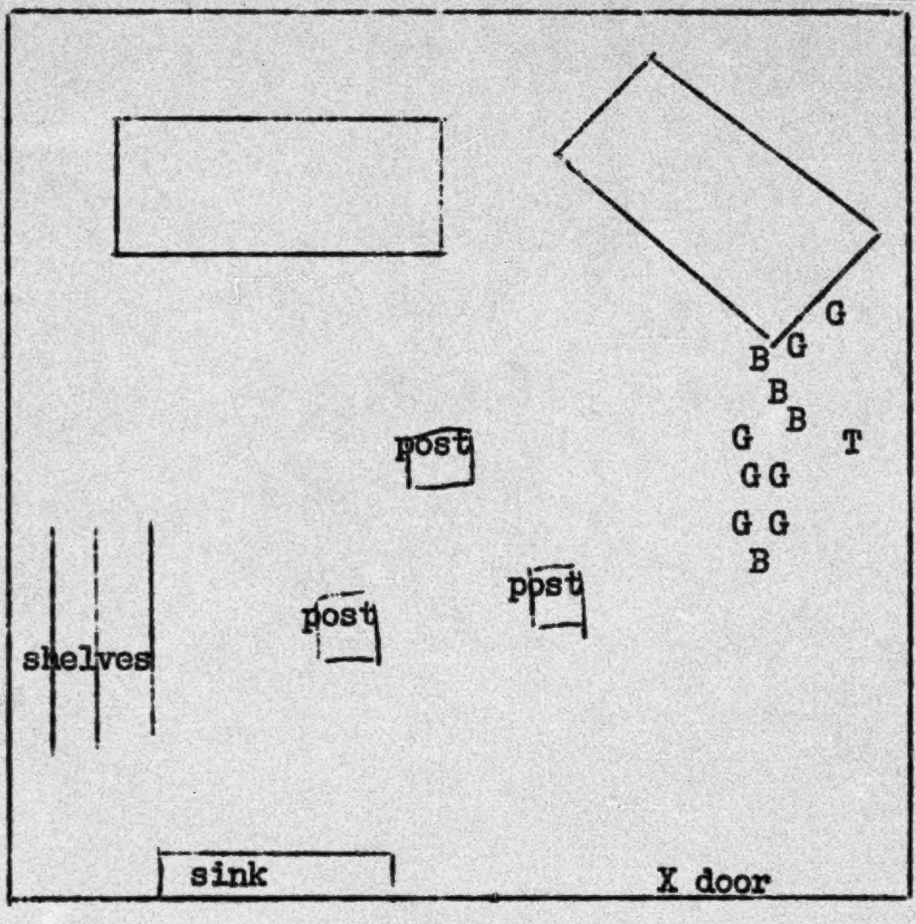


Figure 9 specifically and more generally Figure 2 and Tables 1 and 2 show the teaching during the sample thirty minutes to be unique in some respects. This record was the least collaborative in the sample with open-endedness for pupils provided only in implementing pupil behavior. However, compared to the other samples, this protocol carried the greatest amount of content development as a single function and the greatest amount of setting expectations for pupil performance. The teaching provided almost an equal distribution between working on content or task and maintaining social order. Also the teaching pattern was highly consistent. It is probable that high teacher direction in setting explicit standards for pupil performance and the incidental interviewing of pupils busy on individual projects along with some

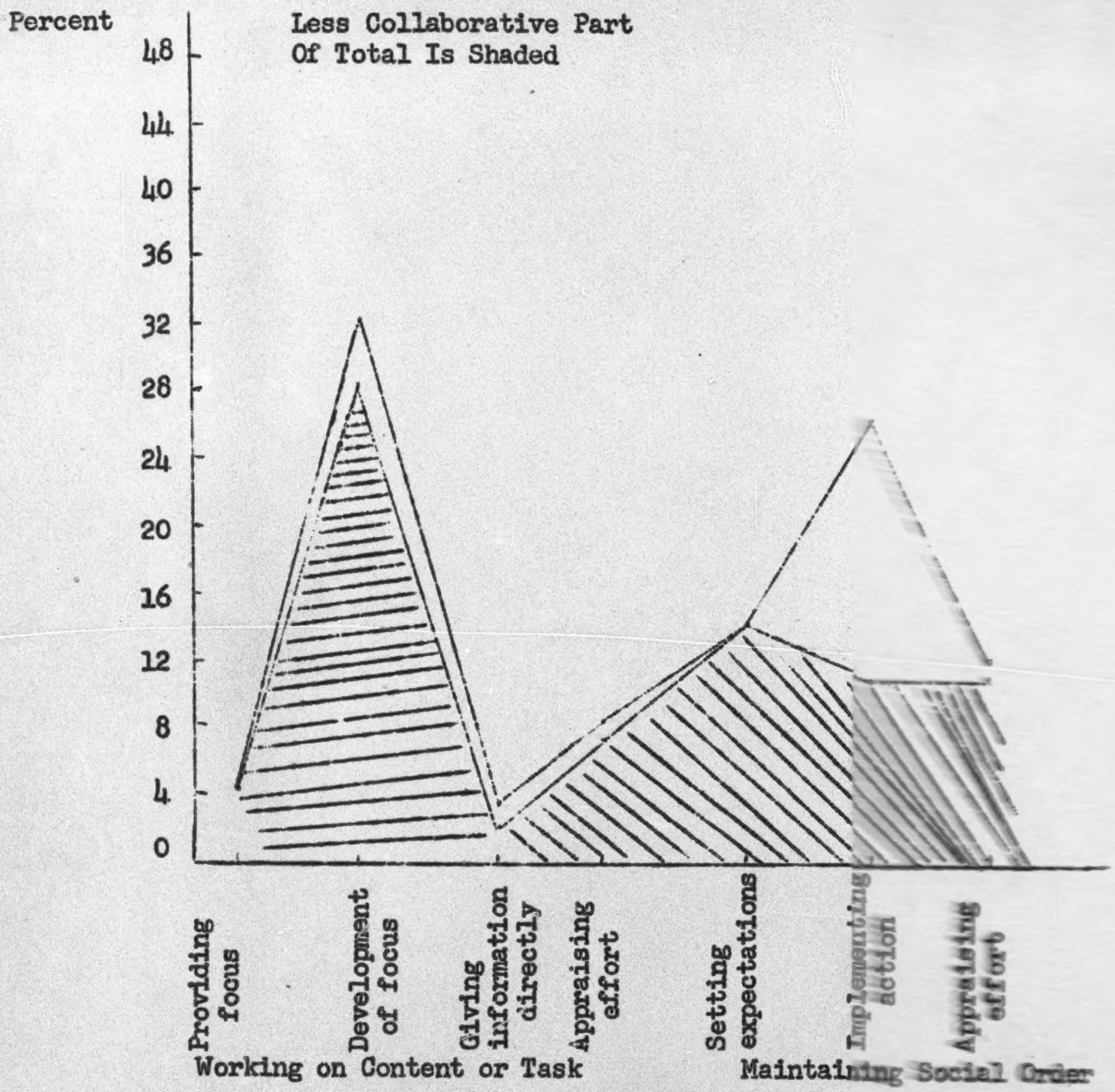


FIGURE 9
PROPORTION OF CODED BEHAVIOR IN EACH CATEGORY, PROPORTION MORE COLLABORATIVE AND PROPORTION LESS COLLABORATIVE FOR TEACHING IN CLASSROOM G

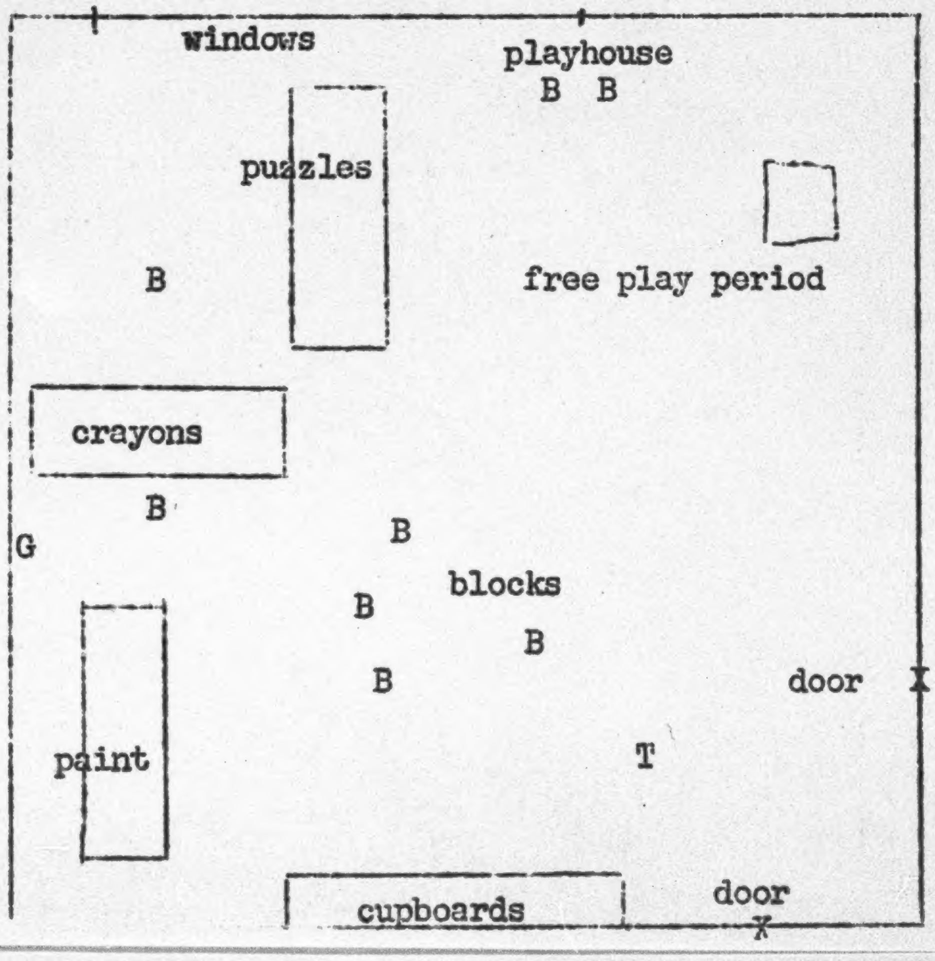
openness in the regulating of pupil behavior did indeed produce an effective learning environment for the children concerned.

The observer's report indicated that the teacher was both competent and experienced and had been "experimental" in her approach. She apparently had learned when structures and routines were useful and where more openness was desirable. Expectations were made clear to the pupils and the follow-up was firm and consistent, but also kind and caring. The instructional program reflected clear and consistent goals. There was wide use of a variety of imaginative games and other activities as well as excursions about the neighborhood.

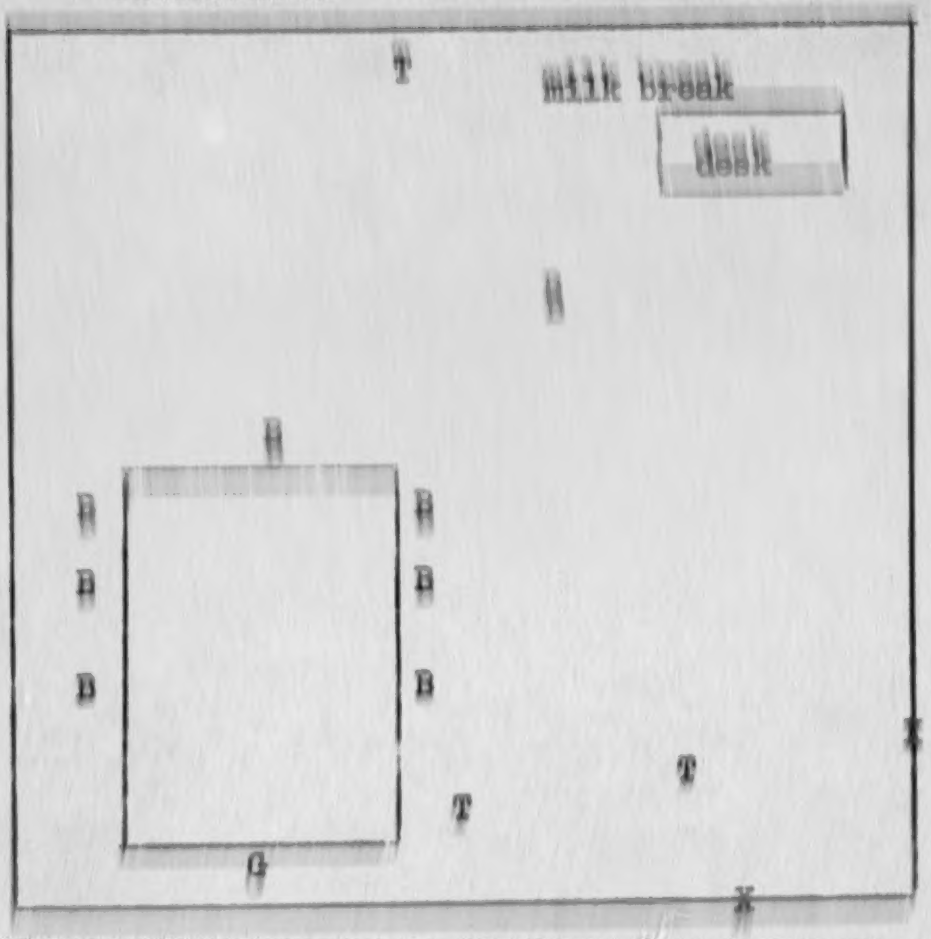
Classroom H

As a physical facility this classroom was adequate in location, size, and general usefulness. There were sufficient amounts and varieties of equipment and instructional materials and these were arranged effectively. As a group, the pupils were described as both "deprived" and "difficult." The following diagrams indicate activities at two times during the recorded session.

Classroom H1



Classroom H2



Figures 2 and 10 and Tables 1 and 2 describe the classroom conditions at the time of the recording. There was near balance between attention to content and attention to the maintenance of order. There was also near balance on the collaboration dimension. Many of the questions were open-ended and many of the pupils' comments were clarified by the teachers. There was almost no standard setting with the major control of activity provided through reprimanding or rewarding type statements along with a substantial amount of pupil regulation.

The report of the observer indicates that the analysis from the recorded session may be open to some question. The classroom group was seen as nearly out of control. Organized group teaching activities were

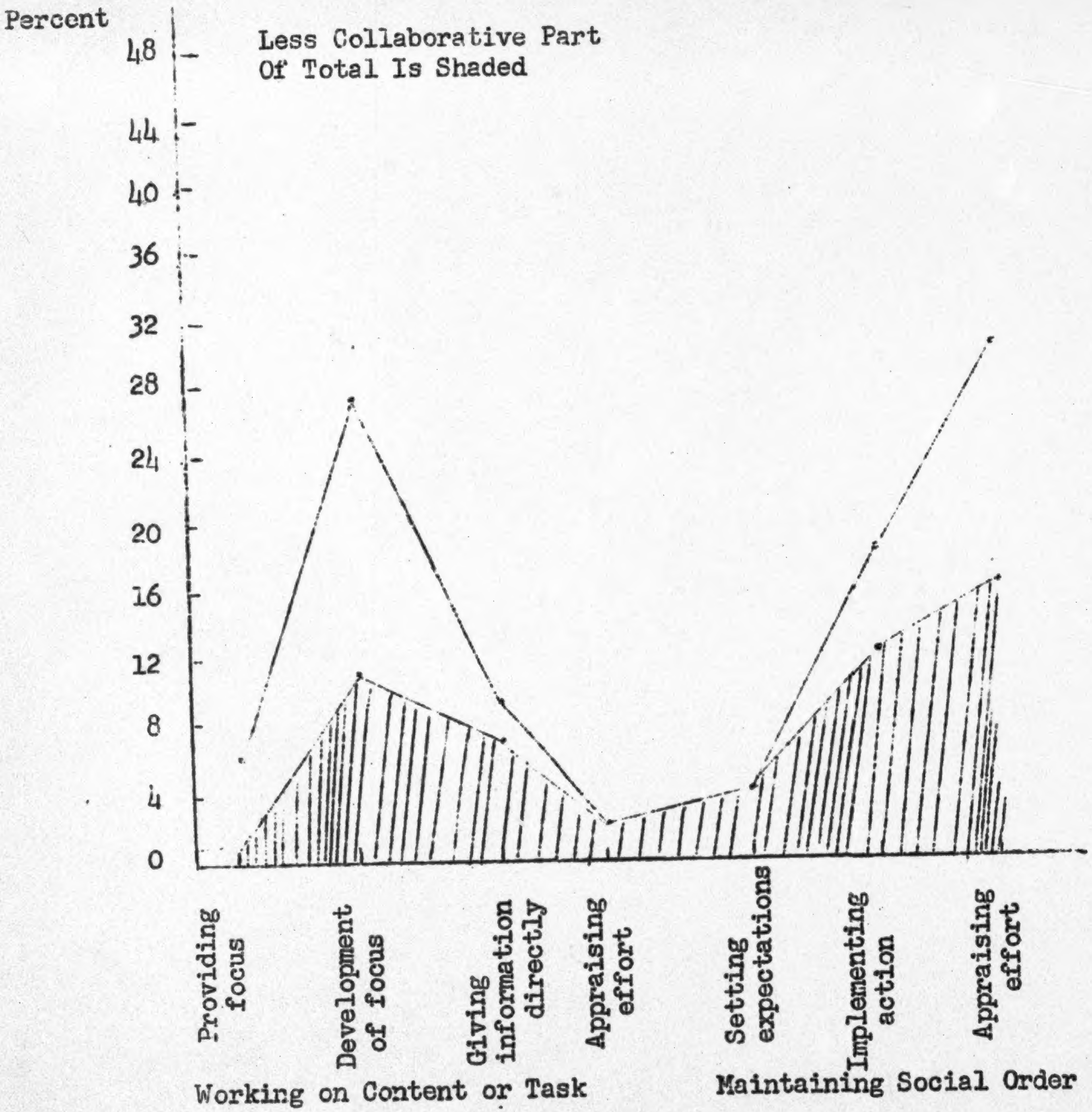


FIGURE 10

PROPORTION OF CODED BEHAVIOR IN EACH CATEGORY, PROPORTION MORE COLLABORATIVE AND PROPORTION LESS COLLABORATIVE FOR TEACHING IN CLASSROOM H impossible. Most of the "teaching" was done in connection with pupils' use of the equipment. Although the head teacher was seen as having a good "feel" for children and as being considerate and concerned, effective classroom learning conditions did not emerge. The teachers were viewed as too busy with pupil misbehavior to be very positive or forward looking. Also it was judged that the head teacher did not have clear, long-range goals around which to make appropriate short-range plans. Although the pupils were undoubtedly "difficult" it was believed that the lack of structure and the few and unclear boundaries helped to promote an unusual amount of "testing," boredom, and mischief making.

Summary

During the last three weeks of the summer program a sample of eight classrooms was studied. Data collected for study included (a) one thirty-minute audio tape recording of classroom and teacher-pupil talk, (b) two diagrams of the classroom and facilities indicating the location of children and adults during the tape recording, and (c) a qualified observer's verbal description of the teaching-learning situation. Time available for study permitted sampling sufficient for description but did not permit drawing firm conclusions.

The tape recordings were processed to provide transcripts which were coded according to the _Collaboration Scale for the Analysis of Classroom Teaching Behavior_.

The eight classrooms provided a wide range of teaching styles and learning opportunities. Physical facilities ranged in quality from the spacious, elaborately equipped, and attractive to classrooms somewhat cramped, modestly equipped and less than attractive. With respect to space four classrooms might be considered to have been more than adequate with two somewhat less than adequate. Only one was considered less than acceptably attractive. Among the eight, only one classroom appeared to have inadequate equipment and all seemed to have sufficient amounts of materials and supplies. With but two exceptions the available equipment and instructional supplies were reported to be well used.

Based upon the limited sample, it is probable that youngsters in all of these classrooms experienced warm and understanding teachers who were genuinely interested in helping the boys and girls in the Head Start program. Three classrooms provided for a relatively high proportion of teacher-learner verbal interaction which was responsive to learner cues. In three classrooms teaching was rather directive, but in two of these instances there was also high content development. Pupils in three classrooms probably had experiences which resembled too nearly day-care centers or baby sitting, however, in four of the eight, substantial attention was given to content and task pursuits. Adequate to very good over-all learning conditions appear to have been present in five or six of the eight classrooms.

Teacher Interviews

At the time that the 30-minute segment of teaching activity was tape recorded, an appointment was made with the teacher for an interview. A standard schedule of probes was employed (Appendix B) and the interview material was tape recorded. The sessions varied in length from approximately one hour to an hour and a half. Following completion of the series of interviews, teachers' responses to each item were coded from the verbatim tape records. The following summary will consider the teachers' responses to each major area provided in the schedule.

The "major advantages" accruing to the children from the summer Head Start Program as seen by the teachers were primarily oriented toward acculturating the child to the institution. Forty-three per cent of the responses indicated that the program provided an opportunity for children to become familiar with the school as a setting, to become accustomed to classroom routine, and to learn some of the necessary manipulative skills. Providing an opportunity for pupils to learn to relate to other children and adults in the classroom comprised 30% of the responses. The remaining 27% of the responses referred to the testing program and health services provided by the Head Start program, help with the development of language skills and the provision of varied experiences outside of the childrens' usual range of opportunity. In responding to this question, a strong tendency is indicated for teachers to see the primary advantage of the program in terms of the general goal of Head Start in preparing children for formal school experiences. This is seen, however, primarily in relationship to helping children meet the expectations and demands of the system rather than providing a broader base of experience, skill, interest and attitudes which would help to equip the child to become a more adequate learner.

In describing a "typical day," teachers outlined the general schedule of activities which they followed. At one extreme, the description indicated a complete lack of planning and a high degree of dependence on incidental experience in a program consisting of one hour of free play, washroom break, milk and crackers, and one hour of outdoor free play. At the opposite end of the continuum, descriptions indicated plans directed toward achieving both long and short term goals relative to altering childrens' behavior. A program of this nature included the following sequence of activities:

1. Show and Tell Time
2. Free Play--Each assistant having responsibility for an area
3. Washroom Break
4. Quiet Time with Books
5. Milk and Crackers
6. Outside Play Period
7. Story Time and Music

Variation in program often occurred because of a unique physical setting, or auxiliary services provided by a particular location. Specific attention to vocabulary building was noted by five teachers and two mentioned specific work in introducing a limited sight vocabulary as a beginning reading activity, particularly with older children. Although these events may have occurred in the program, it is worth noting that no teacher indicated contact with parents or involvement of parents in the daily program as a part of their "typical day."

In thinking about what they "might do differently" if given another similar opportunity, each teacher tended to focus on her own unique concerns. With the exception of two teachers who indicated that they would work in much the same way as they had this summer, suggestions for changes can be included in the following general categories: 1) more thorough preparation of teachers for working with children from economically deprived homes, 2) provide a longer intervention, 3) have available more knowledge of the children prior to the experience to aid in planning and grouping for learning activities. The main thrust of suggestions for change are in the direction of more thorough preparation of teachers for this type of program rather than changes in the manner in which the teacher worked or the setting in which she worked.

When asked for specific activities which were pointed toward "helping children become prepared for school," five teachers listed readiness units such as telling time, printing names, counting, and learning to identify colors. Four of the teachers did not respond with any specific program intended to aid in adjustment to school. The activities which were listed are entirely academic in nature and directed toward the development of specific areas of knowledge.

The need to "differentiate the program" did not become apparent to the teachers until the program was well under way, and then only to some of them. Six teachers mentioned a need to provide different activities for the older children and mentioned such items as providing more readiness work and physical activity as compared with younger children. Generally the teachers verbalized the need for establishing different goals for individual children and groups of children and stated the desireability of establishing "immediate goals" and "secondary goals." However, only three of the nine teachers listed specific goals and indicated the use of program activities as a vehicle in achieving them.

When asked about those aspects of the program that were "very successful," all teachers indicated that at least part of their program had been successful and two felt completely successful. In mentioning the specific activities which were "successful," 50% of the responses were evenly divided between various types of art activities and free play activities, both indoor and outdoor. Activities such as music, stories, walks, and trips accounted for another 30% of the successful activities listed. Single mentions included such items as: a meeting with the parents during the first week of the program, the individual attention of adults to children, instructional games, and particular events or activities which occurred only once during the summer program.

As will become immediately apparent, the list of events or activities which were "unsuccessful" reported by the teachers is significantly shorter than the list of successes. This may indicate that teachers did not venture beyond the "tried and true" in their programs, the question generated a defensive posture, or the teachers considered very few of the activities to be unsuccessful. In responding to the item, one teacher indicated that the children were very enthusiastic and all activities were successful. Three teachers mentioned one activity which was unsuccessful, three others mentioned two, and two teachers listed three items. With the exception of stories being mentioned by two teachers, activities such as telling time, working with commercial plasticene, taking trips, making long explanations and specialized art activities were mentioned only once.

The series of questions regarding "procedures used in program planning" provided an indication that careful planning was not a characteristic of the program. Three teachers reported that they prepared a plan for each day, kept a formal record of these plans, tried to follow them and informally evaluate and re-plan on the basis of success and appropriateness. Less specific planning was reported by another three teachers in terms of discussing the program with the assistants at lunch time or at the close of the day's classroom activities. No systematic attention to program planning was reported by the other three teachers. The general lack of definite planning for general program activities and the needs of specific children, as derived from the teachers' comments, occurred for three principle reasons: 1) not enough time, 2) a feeling that it was not necessary, and 3) an unwillingness or inability to set down in advance deliberate sequences or continuity of activities. In those cases where advance planning was done, either the teacher did the planning and then instructed the other adults, or the teacher and the assistants planned together. None of the teachers reported using any program guides or materials for curriculum or activity suggestions and only one teacher reported using the staff of the agency in which the center was housed as resources for the program. The general indication is that other than "brainstorming" and discussing their work with their own staff members, teachers did not use either people or materials as resources for ideas, experiences or enrichment of their programs.

When asked "How do you think children learn?" 8 of the 9 teachers mentioned involvement in an activity or experience. This almost total agreement with the assumption that learning comes through doing provides a rather startling committment to one point of view. It also attests to the impact of early childhood education in projecting pre-school learning as largely a social learning period with only minimal attention to cognitive development.

Orientation programs designed to assist in preparing teachers for the Head Start program were seen by all teachers as well intended. They were divided, however, on the quality and helpfulness of orientation activities. Those who were experienced pre-school teachers felt that the orientation was not helpful to them and expressed a desire for opportunities to work with people who had recently had direct experiences with children. Teachers who had had little or no previous experience in working with this age group felt that the orientation activities were informative and helpful to them. Four of the teachers remarked that no orientation could be as adequate as actual experience with children.

Short trips outside of the neighborhood of the Centers were generally received enthusiastically by the children but were not seen in quite as joyous a light by the teachers. Arrangements for transportation and the need for petty cash amounts often presented annoying, if not quite difficult, problems. The number of trips taken varied considerably between groups; the maximum number being seven and the minimum one, with a median of four trips. Fire stations seemed to be the most popular site followed by a department store, circus, and museums. None of the teachers indicated the use of trips as a coherent part of an instructional unit or activity sequence. Follow-up activities consisted primarily of discussions (vocabulary) and art work.

Systematic contact with parents was not a part of the program for most of the teachers involved in the Head Start effort. Two teachers had weekly meetings with parents in addition to individual contacts, while two other teachers reported having one or two meetings for parents, having some parents accompany the class on trips, and coming to the classroom to observe. This minimal contact with parents on the part of the teachers is at least unfortunate, and indicates either that responsibility for parent liaison was delegated to the case aide, or that the teachers failed to implement parent involvement as an important and essential part of the summer Head Start Program.

Summary

From the pattern of responses teachers made to the series of questions posed in the interviews, there is no indication of unique or outstanding characteristics which would differentiate the Head Start programs in Cambridge from pre-school programs whose general purpose is that of preparing children for kindergarten or first grade entrance. Although several reasons for such similarity might be advanced, it is clear that the teachers involved in the program did recognize the fact that culturally and economically deprived children presented unique learning and socialization needs. This is evident in that all teachers commented about the childrens' characteristics with such remarks as: "The children don't know how to talk or what to talk about. They can't really play together. These children can't listen to a story when it is read to them, only when I tell it to them. The children didn't know what to do with the materials. They need more materials for the energy they don't seem to know what to do with. They always want to make something they can take home. Sometimes the only thing you can do is to stand close to them."

Despite the fact that teachers recognized special needs of these children as a group and particular needs of individual children, it is evident that, for the most part, they were not able to plan and carry out general nor differentiated program activities designed to meet particular learning or social needs. Since several teachers had not had previous training or experience in working with pre-school age children, lack of knowledge of program possibilities and skill may have severely limited the range of alternatives available to the teacher. The almost universal committment to the theory of learning through activity, coupled with the belief that the Head Start program should not be too "schoolish" or become too formal or academic, provided reinforcement for a program which consisted of a variety of activities without specific direction or goal orientation.

Although the Head Start teachers felt that they would like to have been better prepared for the work they were engaged in, they did not experience a great deal of frustration or failure and considered the majority of their program efforts to be highly successful. The range of experiences open to children was expanded beyond the people and facilities of the classroom by taking trips to various places of interest and walks around the more immediate neighborhood of the Center.

Significant contact with parents of Head Start pupils was implemented by only a few teachers and was not generally characteristic of the summer program. It is apparent that teachers, for the most part, did not recognize the important socialization role of the parents or extend their role definition to include a partnership, intervention, or educational relationship with them.

Classroom Observations

Rationale

Since one of the major goals of the Head Start summer effort was to prepare children so that they might more readily benefit from the educational program offered by the kindergarten classroom, direct observation of the behavior of children in the kindergarten situation was indicated as a crucial data source. One profitable perspective from which to view the classroom teaching-learning experience is to consider how adequately children have learned to observe the rules of the game, that is, to behave in terms of the norms, expectations and limits of the classroom situation. The value of the Head Start program, then, is viewed in terms of its usefulness in preparing children to play the classroom game. The classroom game has rules which are almost never explicit, and the nature of the game itself is only vaguely indicated. (Bellack, 1963; Hughes, 1959; Miller, 1958). It is assumed that the particular skills needed by the players are largely foreign to children growing up in depressed areas.

The following paragraphs present the operational dimensions of the classroom game considered to be of major concern within the present study.

> The teacher will run the game mostly through giving oral, but also some non-verbal, cues. The teacher runs her own always unique game.
>
> A player must be able to follow teacher cues or he is lost.
>
> A successful player must be able to follow oral and the more subtle non-verbal cues. He must not require physical handling to gain his cooperation.
>
> A successful player must understand the language used by the teacher, both oral and non-verbal.

The classroom game will usually involve a group of children in more or less common activity.

> The successful player must be able to "share" the attention and affection of the adult with other children. He will fail if he uses his time and energy competing for the love and attention of the teacher.
>
> The successful player must be able to work (play) with other children all around him. He can only have so much space and so many turns. He must be able to share space, turns, objects, and other materials.

The classroom game will usually involve activities (reflecting values) which are highly stylized, artificial or strange to the childs' previous experience, and often involve the semi-abstract or abstract as contrasted with the concrete. Literal mindedness, in excess, is not advantageous.

> He must strive to be "first," be "best," be "neat," be "quiet," be "nice," be "good," be "cooperative."
>
> He must strive to be "first," be "best," etc., with pencil-and-paper and book type activities.
>
> He must strive to be "first," best," etc., with respect to vicarious or "representative" experience as contrasted with real and first-hand experience.
>
> He must strive within rather rigid patterns which he often must discover, and he must help to build and maintain such patterns.

The classroom game will usually include within its environment objects and events richer in variety than the deprived child has been used to.

> He must exhibit flexibility and curiosity in discovering and mastering the pertinent aspects of the school environment. He must not perseverate.
>
> He must be able to make use of "help" that may be available, by asking questions, and requesting assistance, but he must do this without being rejected as a "pest."

Development of a Category System

Concurrent with the development of a framework for viewing children's classroom performance, instruments were considered, modified, and tested on a population of kindergarten children. The thinking and experience of this phase led to the development of an observational system which was directed at coding observable behavior, required a minimum of qualitative or value judgments, and focused on two major elements indicating degree of adaptation to the formal classroom situation; response to the task inductions of the teacher and participation in the group setting.

In developing the specific set of observational categories, sophisticated observers obtained 30-minute records which described all of the behavioral acts emitted by specified pupils. These records were then coded in terms of behaviors which indicated an understanding of the general requirements and expectations of the classroom and those which did not. The general terms used to describe these two sets of behaviors were indications that the child was either "with it" or "not with it."

The categories of coded behavior were subsequently used to develop an observation schedule. After further try-out and minor revision, the present format was finalized. (Appendix C)

Observer Training

Observers were recruited from the population of senior students at Lesley College who had indicated an interest in participating in the program. Twelve girls whose free hours permitted maximum utilization during public school hours were selected for training.

The observers were given a week of training in groups of 6 prior to actual data collection. The sequence was initiated with a description of the role of the observer and the procedures which were to be followed. The observation schedule was presented and the categories explained and discussed. Each observer was informed that she would observe a child for a half-hour period making a tally of the observed behavior at 15-second intervals. Following this step, training in the coding of behavioral segments was begun by presenting statements of behavioral acts which had been recorded during the development of the observation schedule. (Appendix D) Items were presented at 30-second intervals. The observers made verbatim recordings of these items, then tallied them on the observation schedule. Discussion of placement criteria and discrepancies helped to internalize the coding system and rationale.

An opportunity to practice observation of children in the classroom was provided in the kindergarten classroom of the Lesley-Ellis School which serves as a laboratory school for the College. Initially the observers wrote brief descriptions of the behavior of a selected child at 30-second intervals for a period of 15 minutes. The recorded behavior was then compared with the trainer's notes to resolve discrepancies and clarify interpretations. These records were finally coded on the observation schedule and tally records compared.

Following this sequence, the observers returned to the classroom and tallied the behavior of the same specified child directly on the observation schedule. After a 15-minute period of recording at 30-second intervals, observation records were analyzed and compared. A third period of observation was then provided in which the trainees and the trainer recorded the behavior of a specified child for a period of 15 minutes at the rate of 15-second intervals.

A final training session and reliability check was provided in a public school kindergarten classroom which was not a part of the sample, but whose pupils represented a neighborhood similar to that of Head Start children. Both the trainees and trainer recorded the behavior of the same child for 30-minute periods at 15-second intervals. Median reliability scores computed as percentage of agreement between check coder and observers and between observers are listed in the following table.

TABLE 3

MEDIAN RELIABILITY SCORES AT COMPLETION OF TRAINING PERIOD

Category	Range	Median
Between Trainer and 12 observers		
Total Tallies	.86 - .98	.89
With It Tallies	.82 - 1.00	.92
Not With It Tallies	.33 - 1.00	.80
Between 12 Observers		
Total Tallies	.86 - 1.00	.97
With It Tallies	.82 - 1.00	.96
Not With It Tallies	.44 - 1.00	1.00

Observation Procedure

Within a period of eight days during the fourth and fifth weeks of the school year a total of 172 hours of observation was completed in 17 classrooms in 9 school buildings.

Arrangements for observation in buildings were made through the administrative offices of the Cambridge School System. A member of the study staff visited each principal and teacher involved in the sample. The purpose of the visit was to discuss the study, to present the observation program, to outline the role and function of the observers, and to answer any questions. Copies of the observation schedule were furnished to teachers and principals during the discussion.

In order to facilitate transportation arrangements and to observe more children within the same classroom during a given time period, observers were assigned to work in pairs. During a one-hour period, each observer recorded the behavior of a Head Start and a non-Head Start child.

When entering the classroom, observers asked the teacher to identify the children whom they were assigned to observe. The teachers were asked not to discuss or provide any information about the children. Observers did not know if a given child had or had not participated in the Head Start Program. Observers spent the first five or ten minutes in the classroom to familiarize themselves with the general pattern of activity in the room before beginning actual recording.

During the observation program, each observer was given from two to four check coding visits. The median reliability scores between check coder and observers are listed in the following table. (For complete listing of reliability scores, see Appendix E.)

TABLE 4

MEDIAN RELIABILITY SCORES--CHECK CODER AND OBSERVERS

Category	Range	Median
Total Tallies	.67 - .99	.90
With It Tallies	.51 - 1.00	.85
Not With It Tallies	.23 - 1.00	.83

The greater degree of variation in the Not With It category is in part accounted for by the fact that relatively fewer instances of this type of behavior were recorded, hence a small difference in the number of tallies had a significant impact on the size of the reliability index. The general level of agreement, however, is sufficiently high to warrant confidence in the use of the observational data.

The Sample

In defining the sample, lists of children who had participated in the summer Head Start program were obtained. Through the assistance of the Cambridge School Department, enrollment lists from kindergarten classrooms were provided for buildings which served neighborhoods serviced by Head Start programs. Children who had participated in the Head Start program were then located in the various classrooms. Although the original intention was to include a sample of first grade children in this study, the number of Head Start children enrolled in the first grade level was too small and restricted to too few classrooms to permit completion of this part of the study.

From the initial kindergarten classroom lists, 269 Head Start children were located out of a total Head Start population of 484. The remaining 215 Head Start participants were subsequently accounted for by the School Department in private school enrollment, first grade enrollment, late registrants in kindergarten classrooms, or change of residence.

The study sample was obtained by matching the Head Start participants with a non-Head Start child of the same sex selected on a random basis from the population of non-Head Start children in the same classroom. This procedure was based on two major assumptions concerning the nature of the population. Same sex pairings were selected since there is considerable evidence in the literature indicating that females tend to excel males in a number of indices of school performance. As it was considered essential to minimize the effects of differential classroom treatments between Head Start and non-Head Start samples, a randomized procedure for selecting pair mates from within the same classroom populations was used. Since children from a given classroom were drawn from the same neighborhood, it was expected that this procedure would provide a useful approximation of matching on the basis of relevant demographic variables given the sample size and the unavailability of specific criterion data on this population. Through this procedure, 80 male and 78 female pairs plus suitable non-Head Start alternates were designated. From this sample population, useable records were obtained for 50 pairs of male subjects and 54 pairs of female subjects yielding a total sample of 208.

Observation Data

To compensate for differences in observer tally rate between a Head Start and non-Head Start pair, scores for each observation category were adjusted for all cases where the difference exceeded .50 tallies. In order to reflect differences in the relative importance of categories of observed behavior as indicators of being "with it" or "not with it," a simple weighting system was applied to the scores. Item II. C, "Playful physical contact" was dropped, having been judged that it was not relevant to discriminating between the two general types of pupil behavior. All other categories were used at their given value with the exception of items I.A, "Participates to a high degree," I.C, "Does not participate," and all sub-categories of item IV, "Teacher Intervention" which were given a weighting of 2. Designation of weights and "with it," "not with it" indicators for all behavioral categories are presented in Appendix F. Weighted values for observation categories were then obtained and ratios between "with it" and "not with it" scores computed for each subject. Mean scores for Head Start and non-Head Start male and female subjects are listed in the following table.

TABLE 5

MEAN WITH IT SCORES

	Head Start	N	Non-Head Start	N	t
Female	47.76	54	47.99	54	--, NS
Male	28.96	50	19.50	50	.78, NS

Comparing male and female within categories, Head Start Male-Female t=1.25, NS; Non-Head Start Male-Female t=1.95, ($p < .05$).

The scores for Head Start and Non-Head Start female subjects are almost identical. There is a small difference in favor of the Head Start boys. Differences between the sexes indicate a somewhat lower level of adaptation to the classroom on the part of males as compared with females.

The observation data was also examined in terms of Head Start, Non-Head Start pairs. The following table summarizes the analysis of pair member with highest "with it" score.

TABLE 6

PAIR MEMBER HAVING HIGHER WITH IT SCORE

	Head Start Pair Member Higher Score N	Non-Head Start Pair Member Higher Score N
Female	30	24
Male	28	22
Totals	58	46

The pattern of differences obtained in this analysis is essentially the same as that presented in the table above. None of the differences noted are significant as determined by the Wilcoxen Test.

The data obtained from classroom observations indicate that during the early weeks of school, there was substantial similarity in the degree to which Head Start and non-Head Start kindergarten pupils responded to the task inductions presented by the teacher and their response to the social situation provided by the classroom. Consistent with the findings reported in the literature on child development and early childhood education, the observation data indicate that girls behave in a more adaptive manner than do boys.

From the gross number of tallies recorded during the observation period, it is evident that kindergarten children tend to meet the task prescriptions set by the teacher and accept the established limits for social contact with their peers. Table (7) summarizes the total tally record for With It and Not With It categories by male and female subjects.

TABLE 7

OBSERVATION RECORD

	With It Tallies	%	Not With It Tallies	%	Total %
Females	10,740	88	1,506	12	100
Males	8,655	78	2,492	22	100
Total	19,395	83	3,998	17	100

Implications for Teacher Training

As a consequence of employing senior education students for the classroom observation program, a valuable, unanticipated teacher-training experience resulted. The twelve senior students who were trained as observers had previously completed eight weeks of student teaching in their junior year in addition to some time in general classroom observation. As a consequence of the training period and observational task, however, they were sensitized to specific aspects of the behavior of kindergarten children. One of the observers put it this way, "One of my earliest reflections on Head Start observation was the fact that I had never before in my whole life observed a person exclusively for any length of time." Through the experience of logging the incidence of certain pupil behaviors the students became particularly aware of the differential reactions of pupils to the verbal and non-verbal inductions of the teacher under a variety of classroom conditions. The procedure provided that two students were present in a given classroom at the same time observing different children. The informal comparisons of differential pupil reactions to identical classroom conditions and teacher-induced learning activities proved to be particularly potent demonstrations of the reality of individual differences and brought this learning point to the attention of the students in a manner which could not be duplicated in the college classroom.

In addition to direct observation of pupil behavior under a variety of conditions in the classrooms, the student observers incidentally became cognitive of variations in room arrangement, teachers' use of displays, equipment, and materials. By virtue of the fact that students were able to spend one or more hours in each of seven or eight different kindergarten classrooms in several buildings, they obtained an unusual opportunity to see the work of a number of experienced teachers and incidentally note the teaching methods which they employed, their general approach to classroom management and the learning climate which was created.

In addition to the value of incidental learnings regarding methods of teaching and variability in pupil behavior, the students gained valuable experience in presenting themselves to principals and teachers. It happened that several building principals were not notified that the observers would be present prior to the time they appeared. In these instances, the observers were called upon to present themselves and their task to the principal and respond to any questions which might be posed about the purpose and procedure of the observation program.

It became apparent that a large segment of the campus was made aware of the data gathering program through informal sessions in dormitories and smokers as observers shared their experiences with fellow students. Several faculty members provided additional opportunities for the observers to describe the data gathering technique and share their experiences with students in seminars and classes.

Although it would be presumptuous to think that the observation experience was the only factor, it is reasonable to assume that it did contribute to a heightened interest on the part of these students to request and accept student teaching assignments in economically depressed areas. These students appeared to be realistically aware of the problems and concerns of children attending schools in such areas as a result of their data gathering experience. Subsequent to the experience, several of these students have made application to teach next year in schools which serve children from economically deprived neighborhoods.

In general, the data gathering program presented the teacher trainees with an unusual professional growth experience. They gained skill in using a systematic format for the observation of children's classroom behavior, they were presented with incidental opportunities to observe the classrooms and teaching practices of a number of experienced teachers, and they were occasionally called upon to present the research program to principals and teachers. Participation in the data collection program provided interest and intelligent concern on the part of some students who plan to teach children from deprived areas and feel that they are better prepared as a consequence of this experience.

Interviews with Kindergarten Teachers

A rich source of data concerning the general pattern of adjustment of Head Start children to the classroom consisted of the observations and judgements of kindergarten teachers who received the children in September. In order to systematically obtain the impressions of teachers who had been working with the children for several weeks, an interview was obtained with each of the teachers in the 17 kindergarten classrooms where sample children were enrolled.

Procedure

In conducting the interviews with kindergarten teachers, a standardized introductory statement and series of questions was used. (Appendix G) Interviewers, who were members of the study staff, kept verbatim notes of interviewees' comments. Copies of the classroom roster were made available to each teacher indicating those children who had participated in the summer Head Start program. Appointments for the interview were made with the teacher and were most frequently conducted at the school building after the children had been dismissed for the day. When two teachers were assigned to the same classroom on a regular basis, both teachers were present for the interview. On two occasions, when special circumstances required it, teachers from two different classrooms were interviewed simultaneously. When more than one teacher was present for the interview, care was taken to elicit comment from each individual for each of the items. The interviews required from 30 to 45 minutes to conduct. They were completed with 22 teachers from 17 kindergarten classrooms during a four-week period beginning the last week in October.

After the interviews were completed, responses to each item were coded from the written records. Teachers' responses to each major question will be presented in the following summary.

Interview Summary

When asked if they had "noted any areas in which Head Start children seemed to be better prepared for school as compared with non-Head Start children," 13 teachers indicated that they did not note substantial differences in the degree of preparation for the learning tasks that were required of them. Another group of 5 teachers stated that they found it difficult to generalize about the Head Start children as a group since they found rather wide differences in the readiness level of individual children indicating that some were quite well prepared whereas others were not. A definite difference, particularly during the early weeks of the school year, was reported by 4 teachers. They reported that children who had experienced the Head Start program were more familiar with the use of materials than non-Head Start children, they knew more songs, and had learned manipulative skills such as the use of scissors. These teachers also reported that Head Start children displayed more imagination in their play and talked more frequently than did non-Head Start children.

In terms of both individual teachers and classrooms represented, approximately 60% of the sample indicated that they noted no particular differences between Head Start and non-Head Start children in the degree to which they were prepared for the learning tasks which the teachers presented to them. The remaining 40% was about equally divided between those who noted differences for some Head Start children and those who felt that they were generally better prepared as compared to non-Head Start children.

When asked about the degree to which children accepted the classroom routine and limits, one teacher indicated that Head Start children accepted and fit into the classroom routine better than non-Head Start children. Four teachers indicated that they noted no differences, while one stated that some Head Start children appeared to be shy and immature but others fitted into the program readily. The other 16 teachers, representing 11 of the 17 classrooms, found the Head Start children to have experienced more difficulty than non-Head Start children in accepting and adjusting to the limitations and routines of the classroom. Although teachers felt that this behavior was characteristic during the opening weeks of school and was no longer true after two to four weeks had elapsed, they generally found the Head Start children more difficult to manage. The general tendency seemed to be for Head Start children to assume that the norms which prevailed in the summer classes were also present in the kindergarten classroom. Teachers characterized their behavior as "not waiting for instructions or the establishment of procedures and routines" but "helping themselves to materials and equipment" and playing in a rather "noisy, boisterous" manner. They also stated that there was a tendency for Head Start children to ignore the instructions and comments of the teacher.

In responding to a question regarding childrens' "participation in learning tasks set by the teacher," all of the teachers indicated either that they noted no particular differences between Head Start and non-

Head Start children or that there was considerable variation between individuals in both sub-groups. Several teachers commented that they were initailly concerned that children who had participated in the summer program might find kindergarten boring or repetitious but that these children had given no indication that they were repeating things that they had done during the summer and were participating actively in the on-going program.

With respect to "social relationships with other children," 8 teachers representing 7 classrooms reported that there were no differences between Head Start and non-Head Start children. Representing another 4 classrooms, 6 teachers indicated that either it was primarily a matter of individual differences or that Head Start children tended to be "more aggressive," "wanted to be first," and were inclined to be "bossy." Indications that Head Start children made better social adjustments than non-Head Start children were reported by 8 teachers representing 6 classrooms. Their comments indicated that Head Start children "got along better with other children," they were "used to playing with others," and they engaged in less solitary play as compared with non-Head Start children.

When asked about "any disadvantage which might be attributable to the Head Start Program," 6 teachers from 6 classrooms replied that they did not see any disadvantages to the program. The other 16 teachers representing 11 of the classrooms were unanimous in considering difficulties in managing the Head Start children during the early part of the school year as a major disadvantage of the program. Generally they considered this to be a result of excessive permissiveness in the Head Start program. Teachers noted that Head Start children initially made many more requests for help and approval from the teacher than non-Head Start children did. They expected to be quite free in helping themselves to material and equipment, moving about the room and were not very responsive to the teachers' control inductions. As one teacher expressed it, "It's tough to take children from the freedom of the small summer group where they had several adults to a large group where more control is needed."

When asked if they had "any suggestions for increasing the effectiveness by which children can be prepared for school in a future Head Start program," 18 of the teachers responded with specific suggestions. About 50% of the suggestions given recommended a more definite program providing more structure with less emphasis on free play. The balance of suggestions was about equally divided between such items as: helping children improve their speech through providing additional opportunities for conversation with adults and vocabulary building; provide more experiences which these children do not ordinarily receive from their homes such as field trips, science programs, and exposure to books; lessen the gap between Head Start and kindergarten programs by having Head Start teachers and kindergarten teachers work together; and providing children help in learning to follow directions from adults.

Summary

From the point of view of the classroom teacher receiving Head Start children in September the most dominant theme expressed in the interview responses is the matter of concern with their difficulty in managing the

Head Start children during the early weeks of school. This factor was mentioned by 72% of the teachers in connection with a question concerning the acceptance of classroom routine and limits. It was again cited by the same teachers as a disadvantage of the Head Start program. In terms of the intensity of feeling expressed and the amount of teacher comment during the interview period, this area of concern received more attention than any other single issue. These teachers generally indicated that the behavior of the Head Start children during the early days of school was a marked change from the usual beginning point in that children ordinarily are very attentive to the instructions and management inductions of the teacher. In these cases it appears that Head Start children assumed that the norms and routine which prevailed during their summer experience would also apply in the kindergarten classroom. The teachers were then immediately faced with the task of "re-educating" the Head Start children to recognize and accept the limits and procedures which they felt were necessary in carrying out a program in their classrooms.

Although the teachers did not tend to view this behavior in a favorable light, their comments provided ample indication that children who participated in the summer program were inclined to actively explore the environment of the classroom to try out materials and equipment, to feel at ease in the kindergarten situation, to be more outgoing and to verbalize and request help or information from the teacher to a much greater degree than children who did not have the Head Start experience.

In comparing children who had experienced the Head Start program with those who did not, teachers indicated that they did not notice any general difference in the degree to which pupils participated in the learning tasks which they presented to the class. When considering the general level of preparation for school, the majority of teachers felt that Head Start and non-Head Start children were equally well prepared for their program of learning activities. However, 40% of the teachers felt that either all or some of the Head Start children were more familiar with materials and activities and had better manipulative skills as compared with non-Head Start children.

The pattern of responses indicates that with respect to social relationships with other children, two thirds of the teachers felt that either part or all of the Head Start children in their classroom interacted well with others, enjoyed a high level of acceptance, and were able to assert themselves and attempt to influence others.

The suggestions which teachers gave for increasing the effectiveness of future Head Start programs generally emphasized increasing the amount of time and emphasis given to areas which they felt were included in the summer curriculum. Major emphasis was given to the suggestion that a more highly structured situation with a more definite program should be provided.

Teacher Ratings

In order to obtain a systematic record of impressions derived from classroom performance, each teacher in the kindergarten classrooms having matched sample children was asked to complete a rating sheet. (Appendix H) Ratings were requested for each child in the study sample in addition to some additional children from the same classroom. The ratings were obtained prior to the teacher interview so that information regarding the status of children relative to Head Start participation was not provided to the teacher until after this task was completed.

The rating sheet required teachers to rate the incidence of 11 categories of pupil behavior on a four-point scale from "always" to "never." Each item was scored using a weighting of 0 for "never" to 3 for "always." Items not rated by the teacher were given a score of 1.5. A total score for each subject was obtained by summing scores for the 11 items and rounding to the nearest whole number. Scores were computed only for children who were included in the study sample. Mean rating scores for children by school are listed in the following table.

TABLE 8

MEAN TEACHER RATING SCORES

School	N of Pairs	Female Head Start	Female Non-Head Start	N of Pairs	Male Head Start	Male Non-Head Start
I	5	19.4	23.2	3	21.0	25.0
II	7	19.43	20.14	9	19.22	19.89
III	7	21.71	24.14	12	20.08	18.0
IV	6	23.17	16.5	4	14.5	21.5
V	7	15.43	18.43	7	13.0	16.14
VI	10	20.4	19.0	4	16.0	16.5

MEAN TEACHER RATING SCORES Cont'd

School	N of Pairs	Female Head Start	Female Non-Head Start	N of Pairs	Male Head Start	Male Non-Head Start
VII	5	20.8	18.4	1	10.0	20.0
VIII	2	28.0	16.5	3	16.0	18.0
IX	3	16.67	15.33	4	19.25	11.75
Total	52	19.83	19.52	47	17.55	18.21

The ratings of teachers generally substantiated the pattern of findings obtained in the classroom observations. Teachers considered the behavior of Head Start and non-Head Start females to be essentially similar. They gave somewhat higher ratings to non-Head Start boys, but this difference is not substantial. The differences in teachers' ratings between the sexes within Head Start and non-Head Start categories are minimal indicating that teachers perceived females and males to be making similar levels of adjustment to their classroom situations.

Readiness Tests

As it was considered desireable to obtain an indication of intellectual performance from Head Start and non-Head Start kindergarten children, a number of measurement possibilities were considered. It appeared that a reading readiness instrument would be most feasible for the purposes of the study. Arrangements were made to try out The American School Reading Readiness Test, Revised Edition, Form X (Pratt and Stouffer, 1964) with groups of children who were not in the study sample but represented neighborhoods similar to those of children in the sample. Experience with this test indicated that the level of difficulty of the required tasks was such that most of the children met with considerable difficulty in comprehending and completing items. Because of difficulties in maintaining childrens' attention on the test materials and the fact that many children were not yielding scorable results, this instrument was rejected as being unsuited to the population. The Metropolitan Readiness Tests, Form S (Hildreth and Griffiths, 1950) was then selected for try out on a sample of kindergarten children. The experience with this instrument indicated that kindergarten children were able to understand and complete sufficient numbers of items to yield a suitable range of scores. On the basis of this data, the instrument was administered to a sub-sample of Head Start and non-Head Start children.

The Sample

Since the matched sample was spread between 17 classrooms, some of which held as few as two to four sample children, considerable efficiency could be gained without serious sample distortion by limiting the Readiness testing program to those classrooms which would yield a reasonable population of Head Start and non-Head Start children from the classroom population. Seven classrooms in five buildings were selected for inclusion in the testing program. The classrooms selected represented nearly equal numbers of Head Start and non-Head Start children in their enrollment, yielding a total sub-sample of 144.

Since the Readiness tests were administered to all children in the designated classrooms, this sub-sample is not identical with the matched pair study sample. Analysis of mean score differences between identical categories of matched sample and other children in the classroom populations tested indicated the differences were negligible. (Largest mean score difference = 4.03; smallest difference = .33). As the greatest mean difference is less than the standard error of the instrument, the samples were considered to be identical on this dimension and all Head Start and non-Head Start children's scores were included.

Procedure

Tests were administered to the entire class in their regular classroom. Children were seated at tables with two to four children at each table. The kindergarten teachers were not involved in the testing procedure. A member of the study staff administered the instruments with the help of two to four assistants, depending on the size of the group. Assistants were trained in testing procedures and were stationed in different parts of the classroom. They were permitted to aid the children in checking samples, moving their fingers to the next row, replacing crayons, and turning pages. No help was given to the children in indicating correct responses or errors in response.

Two staff members served as test administrators. They had worked together during the first part of the testing program and followed the same procedure in administering the tests.

The children were of course not familiar with a testing situation. The tests were described to the children as "games" as prescribed in the test manual. It was pointed out, and frequently repeated, that the adults in the room were interested in what each child could do, and they should "keep your eyes on your own book." The need to watch closely and listen carefully was also repeated periodically.

The test was administered in two sittings, separated by at least one day. The same person administered both sittings in any given classroom. Each sitting required approximately 45 minutes. The sub-tests included in each sitting were as follows: First sitting--1) word meaning, 2) sentences, 3) information; Second sitting--4) matching, 5) numbers, 6) copying.

After each sub-test was completed, short periods of activity such as exercises, singing, or finger plays were provided to give the children an opportunity for movement and relaxation.

Results

The mean total Readiness scores for each school are reported in Table 9.

TABLE 9

MEAN TOTAL READINESS SCORES

	Female		Male	
Category	Head Start	Non-Head Start	Head Start	Non-Head Start
School A				
Number	11	15	12	6
Mean Score	35.45	42.73	34.33	50.83
Readiness Rating	E	D	E	D
School B				
Number	2	3	4	5
Mean Score	22.0	41.33	18.5	33.8
Readiness Rating	E	D	E	D

MEAN TOTAL READINESS SCORES Cont'd

Category	Female Head Start	Female Non-Head Start	Male Head Start	Male Non-Head Start
School C				
Number	7	14	14	16
Mean Score	33.29	52.0	43.0	47.94
Readiness Rating	E	D	D	D
School D				
Number	8	3	2	3
Mean Score	36.25	50.0	34.5	51.67
Readiness Rating	E	D	E	D
School E				
Number	7	6	4	2
Mean Score	49.0	40.5	39.0	28.5
Readiness Rating	D	D	E	E
Total				
Number	35	41	36	32
Mean Score	37.14	46.0	36.47	45.41
Readiness Rating	E	D	E	D

There is a distinct trend toward higher Readiness scores on the part of non-Head Start children when compared with Head Start children of the same sex. None of the mean differences reported are statistically significant as determined by the _t_ test, however. The trend toward higher scores registered by non-Head Start children is also indicated by the fact that in the five classroom populations tested, letter ratings of _E_ characterized all but two of the Head Start population mean scores, whereas a rating of _D_ was applied to all but one of the non-Head Start mean scores. Appropriate caution should be exercised in generalizing from the letter rating indications since administration procedures used in this testing program deviated from those specified in the test manual, particularly with respect to specified time limits.

In general, the results of the Readiness test as a measure for the level of intellectual performance capability in learning tasks provide an indication that non-Head Start children in the sample tend to be consistently superior to Head Start children but not to a statistically significant degree. A similar trend is noted for females to excel males regardless of Head Start status.

Summary

Two aspects of the Cambridge Head Start program were considered in this study; the summer teaching intervention and the comparative performance of children in public school kindergarten classrooms who did and did not participate in the Head Start program. In considering the summer program, a sample of eight Head Start classrooms was selected for study. During the final weeks of the program, a thirty-minute tape recording of teacher-pupil verbal interaction was obtained in each classroom, two diagrams indicating classroom facilities and the location of children and adults were completed during the recording, and an observer provided a description of the teaching-learning situation.

Although the sample of classroom program data was much too limited to permit generalizing or even to warrant further study, the investigative procedures looked very promising. Surely important and sizeable differences among the classrooms were found and made objective. These were differences in the availability and use of instructional equipment and materials and in the classroom behavior of the teachers. If further sampling had shown these differences to be stable, then a study of the relationships between these differences in summer programs and pupils' subsequent performances in regular school classes would have been illuminating. If the differences in classroom learning conditions were true differences, then, without controlling for these program variations, it could not have been expected that sizeable subsequent differences would be found between Head Start and non-Head Start children after they had entered regular school.

It seems clear that efficient pupil learning in school is associated with (a) high motivation that is essentially conforming, (b) high ability to discriminate, differentiate, and identify, and (c) high verbal ability in labeling, classifying, describing, and associating. (Some educators and outside critics are exercised because more creative pupil behaviors are not also more necessary in school, but that is beside the point as long as present conditions obtain.) If children from more deprived circumstances are deficient in these respects, then defensible remedial pre-school programs should maximize opportunities for pupils to experience "more," to label the pertinent aspects of such experiences, to label the relationships among the aspects, to label the accompanying feelings and sentiments, and come to "feel good" about the whole thing. In short, these pupils seem to need much rich experience, extended conversation along with representational play directly related to such experience, and warm meaningful human relations.

If six-year-old children from ordinary circumstances acquire the needed motivational sets, discriminatory postures, language skills, and socialization patterns over several years of "free play" and "day-care" type of arrangements, it seems very unlikely that a few weeks of similar "free play" could make up the years of deprivation for Head Start youngsters. These considerations pose important issues for both programing and research. Acceptance of a point of view should dictate selection of teachers, orientation and training of teachers, equipping and supplying the classrooms, and supervising the instructional program.

Should the teaching profiles for the eight classrooms studied prove to be stable, and if the assumptions about the performance abilities necessary to successful schooling are correct, then, because of the relative attention to content as contrasted with maintaining order, the teaching in classrooms A, B, F, G, and H should be more helpful to Head

Start children than that in the other three classrooms. And the teaching in classrooms B, G, and H should be more helpful than that in classrooms A and F. Since classrooms B and G, both high in content development, differ radically in teacher-pupil collaboration, it would be very interesting to know if one was more helpful than the other.

Using terminology from the Collaboration Scale it can be supposed that classroom teaching profiles high in content development (school mode) would be more beneficial to Head Start children than classrooms teaching high in maintenance of social order (tending mode). Similarly, a high incidence of setting expectations (within the maintaining social order dimension) should be more helpful than teaching which is low in this respect. Teaching profiles low in appraising effort may be less helpful than profiles high on this dimension, but the patterning of elements within the profile may be even more significant. Given high content development, high setting of expectations, and proportionate appraisal of effort, it can generally be supposed that the more collaborative profiles would be most helpful.

Procedures have been demonstrated which make feasible the formulation of highly tenable hypotheses and the designing of studies to test them. It is unfortunate that in this respect the present study could not have been organized in time to do more than describe and speculate.

In addition to obtaining samples of classroom teaching episodes, the documentation of the summer Head Start intervention included an interview with the teachers whose classrooms had been observed. This information provided subjective data consisting of teachers' judgments of the consequences of their programs and descriptions of selected aspects of on-going classroom activities.

Although the teachers recognized that disadvantaged children presented special learning and socialization needs, for the most part, their program planning and day-to-day classroom activities did not reflect differentiated sequences which were designed to meet particular learning or social needs. Descriptions of classroom activity sequences indicated that the Head Start programs generally represented typical pre-school programs. Elements such as intensive parent involvement and specific program planning to provide extensive experiences or meet particular program goals proved to be the exception rather than the rule.

From the point of view of the teachers, the principle advantage of the program for children was an opportunity to become acquainted with school, to develop necessary skills, and to become accustomed to classroom procedures and routines. Generally teachers felt that their programs were successful in helping to prepare children for formal school learning experiences.

When considering changes which they would recommend for the program, the principle suggestion was for more thorough preparation of teachers for work with children from economically deprived homes. Although the teachers felt that the orientation programs designed to help prepare them for the Head Start program were generally useful, they did not see them as being sufficiently intensive or of sufficient duration to provide an adequate preparation for the task.

In attempting to assess the effects of the Head Start intervention for participating children following their entrance into the kindergarten programs of the Cambridge Public Schools, four types of data were obtained.

These included classroom observation of the behavior of children, teacher ratings of childrens' behavior, interviews with kindergarten teachers, and a readiness testing program.

During an eight day period beginning with the fourth week of school, 104 pairs of Head Start children and non-Head Start children were observed in their regular classroom activities. Pairs were of the same sex and from the same classroom. The behavior of each child relevant to teacher inductions regarding tasks and their relationships with peers was tallied for a 30-minute period. The data obtained from observations of classroom behavior indicated that both Head Start and non-Head Start children responded quite similarly and appropriately to the task inductions of the teacher and the classroom social situation. Although the behavior of girls indicated a somewhat higher level of adaptability to the classroom than boys, the general indication was that by the fourth and fifth weeks of school, kindergarten children tended to respond appropriately to the task prescriptions of the teacher and to accept the norms of the classroom with respect to their social contacts with peers.

The ratings of classroom behavior, which were completed by kindergarten teachers, yield essentially similar patterns of findings to those obtained from classroom observations. Teachers perceived the behavior of Head Start and non-Head Start children to be essentially similar and their ratings of the behavior of boys tended to be somewhat lower than for girls.

The general picture of classroom behavior obtained from these two data sources is one of essential similarity between Head Start and non-Head Start children. It can be argued that in the more formal setting of the kindergarten classroom, the rules and procedures become readily apparent and a minimum amount of time is required for kindergarten children to discover and conform to the expectations of adults. It appears that at this age level, children are sufficiently aware of the power of adults in the classroom setting and readily learn to play "the classroom game" according to the established set of rules. The fact that quite a different set of rules prevailed in the Head Start centers did not seem to detract from the ability of those who participated in the summer program to discover and conform to a different set of expectations in the kindergarten situation. The data obtained from the classrooms indicated that children quite uniformly learn to accept the general limitations and expectations of the setting and an experience in another school-like atmosphere does not appreciably alter their ability to adapt.

When the pattern of readiness scores is taken into consideration, the population of non-Head Start children in the sample is consistently, but not significantly, superior in performance to Head Start children. This indicated a tendency for our sample to be somewhat imbalanced in that the non-Head Start population were functioning at a somewhat higher level of measured intellectual performance as compared with the Head Start population. Given this indication, it seems that children who experienced the summer Head Start program benefited to the extent that they were able to participate in the social situation of the classroom and the learning tasks established by the teacher just as competently as their peers who were somewhat superior to them in measured performance capability.

The clearest indication of differential effects of the Head Start program is provided by the interview responses of kindergarten teachers. Although they tended to view these factors as essentially negative consequences for classroom management, their comments indicated that during the first two to three weeks of the school term, children who had participated in the summer Head Start experience were noticeably different in behavior than those who had not had this input. Their comments indicated that Head Start children were much more active in exploring the new environment, trying out equipment and materials, engaging in more frequent contact with other children during play periods, and seeking contact with the teacher for information more frequently than were the non-Head Start children. The fact that teachers found this type of behavior to be disruptive, worked to correct it, and reported that it was no longer a problem to them after "two to four weeks" of school supports the contention that by the time the behavior observations and teacher ratings were completed, the Head Start children had learned to accommodate their behavior to the expectations of the particular classroom situation in which they were located.

Recommendations

There is a clear need for establishing a meaningful relationship between the Head Start program and the kindergarten program of the receiving public school system. Regardless of the quality of the summer experience for children, a negative or unsympathetic orientation, or sheer lack of information on the part of the teacher who receives the Head Start child will not provide an optimal opportunity for the continued growth of the learner. This could be accomplished by inviting Head Start teachers and staff members to visit kindergarten classrooms in the neighborhood schools and encouraging the kindergarten teachers to visit Head Start classrooms during the summer. A definite need is indicated for providing an orientation for the receiving teacher regarding the program goals and activities of the Head Start centers. Information regarding the needs, experience, and performance of children as perceived by Head Start personnel should also be shared with the receiving teacher to aid in planning for the further development of the child. If the goals of the Head Start program are to be extended and given further development by the public and private school, then improved articulation between the two programs is essential.

As school systems generally tend to ignore the need for improved functional connections between a sending and receiving teacher as age-graded blocks of children migrate through the educational sequence, the Head Start program has an unusual opportunity to demonstrate the value and methodology of providing educationally meaningful connections between Head Start and the continuation of learning opportunities.

Sufficient lead time should be provided in funding commitments to permit the local Head Start leadership to adequately plan the program to recruit, orient, and train highly qualified center staff personnel. One of the prime virtues of a crash program is that it gets accomplished. The price seems to be inordinately high in terms of relying on assumptions and sketchy outlines rather than the development of commitment to a set of program goals which are clearly understood and internalized. The Head Start personnel need to be much more clear about whether the program is to be one of "tending" or "teaching" and what outcomes are to be worked toward, given one program focus or the other. In considering Head Start program planning, it would serve to provide a stronger transitional link for the child if the summer program were conducted with full awareness of the type of program which the child will enter in the fall.

As teachers tend typically to work with children as the only adult in the classroom, fuller use of the personnel resources made available by Head Start staffing practices would probably result if training in the role of the teacher as manager of the learning situation were provided. Given the assistance of a teacher aide and other helpers, the program of training and supervision should devote specific attention to aspects of delegating classroom responsibilities to other adults and providing supervision of their performance.

The opportunity to establish meaningful relationships between professional educators and parents needs considerably greater emphasis. Opportunities to include parents in classroom projects, excursions, and sessions which provide information and interpretation of the educational program need to be emphasized and carried out on a regular, planned basis.

The complex problems of working toward the alleviation of the poverty cycle require that the Head Start program attend to relationships with several community agencies in addition to the schools. This requires both advanced planning effort and attention to inter-agency relationships and responsibilities both during and following the Head Start intervention. Since there are many worthwhile programs which can lay legitimate claim to the Head Start enterprise, it is essential that consideration be given to the total time demands placed on the children and the program staff and a priority of needs be established. Given a less deliberate inclusion of agency interventions, the total program impact may well become so diffuse as to be meaningless to the children and the classroom aspect become primarily a holding pen for children while waiting to be checked out by various health, welfare, and research interests.

With respect to continued attempts to evaluate the effects of a Head Start program intervention, it is suggested that a much more specific linkage be established between program goals and attempts to measure the degree of attainment of these goals. The research efforts which develop as a consequence of Head Start programs should more deliberately build upon existing knowledge and attempt to extend and further develop what is already known. One such format would begin with the assumption that it has been quite well established that children from poverty environments are generally deficient in language development, range of experience, meaningful relationships with adults, and verbal skills. A Head Start program which focused attention on these areas as specific program goals, with teaching staff trained to provide appropriate learning contexts for achieving them, then permits the development of an experimental-control design which would offer an opportunity to test whether or not specific inductions to try to correct known deficiencies did in fact accomplish that purpose, or to what extent improvement was accomplished.

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APPENDIX A

COLLABORATION SCALE FOR THE ANALYSIS OF CLASSROOM TEACHING BEHAVIOR

Considerable attention has recently been devoted to the behavior of leaders and followers in groups where some sort of product is anticipated as an outgrowth of group effort. The notion that high group productivity is in many ways associated with the effective sharing of leadership functions and responsibilities among all members of the group seems to be established. When in work oriented groups all members feel responsible for the identification and elaboration of goals, for diagnosis of problems incident to the pursuit of the goals, for the production and selection of ideas requisite to the solution of the problems, for the implementation of consequent strategies, and for the maintenance of appropriate feelings within the groups, high productivity can be expected. Business, industry, and government have, increasingly, made use of "training procedures" to increase member interpersonal skills and insights. Educators have been more slow to respond. Little has been done to make interpersonal skills and insights directly applicable to the teaching behavior of classroom workers.

One effort toward the conceptualization of the classroom efforts of teachers in terms of shared leadership is the development of the Collaboration Scale for the Analysis of Classroom Teaching Behavior (Hughes 1959, Miller 1958, 1964, 1965). This scale divides the teaching act into two basic divisions (1) teaching content or task and (2) maintaining social order. From this point of view the teacher may discharge these two basic responsibilities and perform seven teaching tasks by playing a wide variety of roles. A third task (facilitating) has been identified but is considered to be neutral along the collaboration dimension. The teaching tasks identified within this conceptual framework are:

- Working on Content or Task
  - Providing focus
  - Development of focus
  - Giving Information Directly
  - Appraising effort
- Maintaining Social Order
  - Setting expectations
  - Implementing action
  - Appraising effort
- Facilitating

Viewed thus, teaching may be highly prescriptive, directive, non-collaborative and pay little or no attention to cues emitted by the learners, or teaching may be rather collaborative or responsive and pay a great deal of attention to cues from the learners.

Teaching which is highly prescriptive requires the teacher to be very active and to dominate the initiation and flow of the teacher-learning activity; the learners are primarily reactive. Under teaching which is more collaborative pupils have a greater share in the responsibility for the initiation and flow of the teaching-learning activity; here the teacher is reactive as well as active. The difference in pupil opportunity resulting from the teaching behavior emitted while discharging the seven tasks of teaching may be described as differences along the collaboration scale. Profiles may be drawn from samples of classroom teaching which reflect the degree of teacher-learner collaboration operational at the time.

The scale is applied to samples of classroom teaching which have been recorded on tape then transcribed to provide typescripts on protocols. Three of four thirty-minute teaching records have been found to provide a rather stable sample of a teacher's classroom behavior. Intercoder agreement for two independent codings has ranged between .78 and .96.

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TEACHING BEHAVIORS IN PUPIL-TEACHING INTERACTION: COLLABORATION DIMENSION

Less Collaborative (directive)		More Collaborative (responsive)
	WORKING ON CONTENT OR TASK	
	Providing Focus	
	(initial why)	
Structure initial without orientation or public criteria	or	Structure initial with orientation or public criteria
	(initial how)	
Closed initial structure	or	Open initial structure - or structure turnback - or stimulate
	Development	
Intervening structure (open or closed) or Ongoing structure (open or closed)	or	Clarify reflect - or Clarify elaborate - or Clarify examine - or Clarify generalize - or Clarify summarize - or Clarify testing
	Giving Information Directly	
Inform	or	Resource
	Appraising Effort	
Evaluate without public criteria (positive or negative)	or	Evaluate with public criteria (positive or negative)
	MAINTAINING SOCIAL ORDER	
	Setting Expectations	
Admonish	or	Set standard, universal
Set standard teacher edict	or	Set standard, group
Verbal futuristic	or	Meets request, makes arrangement
Moralize	or	Interprets situation or feelings
	Implementing Action	
Regulate, closed, global	or	Regulate, with public criteria, open, neutral
Negative response, personal	or	Meets request, routine
Inform appraisal	or	Clarify personal problem or personal experience
Ignore request	or	Does for personal
Regulate self-teacher estimate of need	or	Acknowledges teacher mistake
	Appraising Effort	
Reprimand without public criteria or with a standard of teaching edict	or	Reprimand public criteria (Standard universal or group developed)
Judge, punish, direction, just	or	Judge turnback
Threat	or	Encourage
Accusative	or	Solicitous
Support, just, stereotyped teacher edict	or	Support specific, personal, universal, group developed

FACILITATING

Regulate neutral, or sequential

Checking, information, routine, involvement

Demonstrate

Clarify procedure

APPENDIX B

HEAD START EVALUATION STUDY
TEACHER INTERVIEW

1. As a teacher, what do you think were some of the advantages of the Head Start Program for the children?

2. Since I saw only a small part of your day, could you describe a typical day or how a usual day goes?
   (Probe for specific activities included in general labels)

3. If you were to become involved in a Head Start program again, what would you do differently?
   What services or what activities would you add?
   Were there any aspects that you would eliminate?

4. In what ways do you think your program will help children make a better adjustment to kindergarten or first grade?
   (Probe for specific curriculum or program activities)

5. In working toward your program goals, did you differentiate your program because of certain pupil needs or special circumstances?

6. What are some of the things that you did that stand out as being very successful?

7. What are some of the things that you did which were unsuccessful?

8. How did you go about making plans for your program?
   When you were planning your day, did you work with anyone?
   Did you use any curriculum guides or printed program material?

9. When you were planning, did you keep any formal record or write up your plans?

10. In your own words, how do you think the pre-school child learns?

11. Thinking back to the training and orientation week, was there anything that you felt was particularly meaningful and helpful for you?
    What would you add, and what would you take away from that training period?

12. Have you taken trips with the children or walks around the neighborhood?

13. What types of activities have you had which involved parents?

APPENDIX C

HEAD START STUDY

Observation Schedule

DATE:____________ TIME: Beginning:______ Ending:______

SCHOOL:______________ TEACHER:____________ CHILD OBSERVED:_________

OBSERVER:__________________

Tally the behavior that applies to the learning situation the children are in. Watch each child for a half hour. Make a tally every 15 seconds.

Special Observations:

HEAD START STUDY

Observation Schedule

Activity:__________________ Time:______ ______________ Time:_____ ____________

I. Task or content area or assigned independent activity--induction by teacher

A. Participates to high degree (actively, enthus.	B. Participates intermittently or half-heartedly	C. Does not participate	D. In task area but not sanctioned or appropriate

II. Socialization--relationships with peers

A. Helps another child or children		B. Hostile behavior		C. Playful	D. Influence	
1.Accepts	2.Offers	1.Severe	2.Minor		1.Positive	2.Negative

III. Use of time after completing assigned tasks

A. Appropriate	B. Inappropriate

IV. Teacher intervention

A. Verbal	B. Non-verbal	C. Physical

V. Requests help or comment from teacher

A. Obtains help or reaction	B. Does not obtain help or reaction

APPENDIX D

OBSERVER TRAINING BEHAVIOR DESCRIPTIONS

1. Looks up when the teacher calls his name.
2. Asks another child to push him on a toy truck.
3. Keeps cleaning up tables while other children get in line.
4. When her picture is done, she stands up and looks at it.
5. Asks the teacher to button his shirt, but she doesn't hear him.
6. He loads smaller trucks into a truck and releases them through a tail-gate.
7. Keeps looking around the room while others are drawing circles.
8. Sings above the group and smiles.
9. Gets another child to line up at dismissal time.
10. Pushes his chair into the side of another child's chair.
11. Yells, "Me too," when more milk is passed around.
12. Breaks her crackers into the milk at snack time.
13. Sits and moves his mouth when his work is done.
14. Helps two boys build a brick wall.
15. Teacher separates two children, he moves back.

APPENDIX E

RELIABILITY SCORES
CHECK CODER AND OBSERVERS

Observer	Total Tallies	With It Tallies	Not With It Tallies
A	.69	.51	.88
B	.99	.99	.89
C	.94	.82	.70
D	.87	.91	.65
E	.98	.98	.77
F	.97	.77	.23
G	.98	1.00	.90
H	.93	.76	.57
I	.81	.83	.80
J	.80	.87	1.00
K	.71	.87	1.00
L	.67	.64	.86

APPENDIX F

HEAD START STUDY

Observation Schedule

Activity:____________________ Time:_____ __________ Time:_____ __________

I. Task or content area or assigned independent activity--induction by teacher

A. Participates to high degree (actively, enthus.)	B. Participates intermittently or half-heartedly	C. Does not participate	D. In task area but not sanctioned or appropriate
With It - 2	With It - 1	Not With It - 2	Not With It - 1

II. Socialization--relationships with peers

A. Helps another child or children		B. Hostile behavior		C. Playful	D. Influence	
1.Accepts	2.Offers	1.Severe	2.Minor		1.Positive	2.Negative
With It 1	With It 1	Not With It - 1	Not With It - 1	-----	With It 1	Not With It - 1

III. Use of time after completing assigned tasks

A. Appropriate	B. Inappropriate
With It - 1	Not With It - 1

IV. Teacher intervention

A. Verbal	B. Non-verbal	C. Physical
Not With It - 2	Not With It - 2	Not With It - 2

V. Requests help or comment from teacher

A. Obtains help or reaction	B. Does not obtain help or reaction
With It - 1	Not With It - 1

APPENDIX G

KINDERGARTEN TEACHER INTERVIEW FORMAT

Head Start Evaluation Study

Record teacher's name and school.

Read to interviewee:

We are interested in obtaining your honest impressions and judgements regarding the positive and negative effects of the summer Head Start Program as you have experienced them in your classrooms. I am going to ask a series of questions--if you would like to explore these or other items in greater detail than present time permits, I would be happy to arrange for some other time to meet with you.

1. Have you noted any areas in which Head Start children seemed to be better prepared for school as compared with non-Head Start children? (Classroom rosters are available if needed.)

   PROBES: a. Accepting classroom routine? Limits?

   b. Participating meaningfully in learning tasks set by teacher?

   c. Social relationships with other children?

   d. Any other? -- Note any additional questions you use!

2. Have you noted any disadvantage which might be attributable to the Head Start Program?

   PROBES: a. Children's expectations regarding activities? Routine? Help from teacher?

   b. Ability to accept classroom limitations and routine?

   c. Any other? -- Note any additional questions you use!

3. Do you have any suggestions for increasing the effectiveness by which children can be prepared for school in a future Head Start Program?

APPENDIX H

TEACHER'S CHECK LIST FOR PUPILS
October 1965

School:________________Teacher________________Pupil____________________

Which of these are characteristic of the pupil listed above? Please check (√) on the line which even most nearly describes the pupil in each instance.

	always	usually	sometimes	never
1. Proceeds with the school tasks assigned rather readily and without much further urging or help from the teacher				
2. Seems ready and willing to take a chance at things that are new or unusual.				
3. Seems to be much liked by most of the pupils; they seem glad to have him (her) around.				
4. Works or plays with the other pupils during school time without much direction or correction from the teacher.				
5. Seems able to assert himself (herself), fights or struggles rather than let another pupil have his way.				
6. In general seems to understand what school is all about and enters into the school business without much extra attention from the teacher.				
7. Seems to start new games or suggest something interesting to do so that others join in.				
8. Tries hard to do things well and to improve.				
9. Is a "good thinker" in the room, gives good ideas and makes good suggestions.				
10. Bosses others around and tells them what to do.				
11. Talks when appropriate, has something to say				
	always	usually	sometimes	never